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ABSTRACT

A self-study manual for students on coping with test-taking anxiety is presented along with a commentary by its author. The manual is designed for use in conjunction with videotapes and practice of anxiety management techniques in a computer-guided practice test-taking session. The manual is part of a program designed to provide a regularly available service for highly test-anxious students in computer-assisted instruction. (RH)

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A Self-Study Manual For Students On
Coping With Test-Taking Anxiety

Technical Report No. 25

FRANK C. RICHARDSON

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A SELF-STUDY MANUAL FOR STUDENTS ON
COPING WITH TEST-TAKING ANXIETY

Frank C. Richardson

This report contains the text of a self-study manual on coping with test-taking anxiety. This manual forms part of an automated program for the reduction of test-taking anxiety in a computer-based learning situation. This program was developed at the Computer-Assisted Instruction Laboratory of The University of Texas at Austin. The rationale and development of the program, as well as an initial study investigating its effectiveness with high test-anxious students completing a sequence of five computer-managed instructional modules (part of an introductory educational psychology course), are described in another report (Richardson, O'Neil, Grant, & Judd, 1973). A second study of the effectiveness of the program (Grant, 1973) has recently been completed. The results of these two studies are summarized and discussed in a paper by Richardson and Grant (1973). This report will briefly describe the test anxiety program and present the text of the manual on coping with test anxiety that forms a central part of it.

The test anxiety program described here is automated in the sense that, unlike commonly-used test anxiety treatment methods such as behavior therapy (e.g., systematic desensitization) or study counseling, the student may complete the program on his own with no contact with a live counselor or therapist. Rather, he observes certain video tapes, reads a special type of manual on coping with test anxiety, and practices anxiety management techniques in a computer-guided practice test-taking session. The program was designed so that, when validated, it could provide a regularly available service for high test-anxious students in computer-based instruction.

There is clear and extensive evidence that anxiety can interfere with the learning process and performance on tests (Sarason, 1960; Spielberger, 1966). Suinn (1968) and Emery and Krumboltz (1967) describe the effects of test anxiety as including an inability to recall and organize material, difficulty comprehending simple sentences and instructions on exams, feelings of tension, disruption of eating and sleeping patterns prior to exams, and sometimes nausea. Test anxiety often leads to failure in the university environment (Alpert & Haber, 1960; Paul & Eriksen, 1964; Suinn, 1968). Eysenck and Rachman (1965) estimate that as many as 20 percent of students have a great deal of fear of examinations. There is evidence that highly test-anxious students receive lower grades and have a higher attrition rate than do less anxious students of equivalent intellectual ability (Paul, 1968; Spielberger, 1962; Spielberger & Katzenmeyer, 1959)

Over the past four or five years a number of college and university counseling centers have developed special treatment programs for test anxiety. Most of these programs involve the application of the behavior therapy procedure known as systematic desensitization (Wolpe & Lazarus, 1966) to test-anxious students, either individually or in groups. The experience of psychologists and counselors in these agencies supports the notion that test anxiety is a widespread problem among students which often interferes with successful academic performance. When it becomes known that this type of program is available, students request it in large numbers. Although clinical impressions indicate that some students who are highly test-anxious are able to perform fairly well on tests in spite of intense fear and discomfort, high test anxiety may engender negative attitudes towards academic work that causes them to curtail or restrict their intellectual or professional development. However, most students who request such treatment indicate that test anxiety often substantially interferes with their performance on tests. A common pattern is the junior or senior student who has superior intellectual ability and is highly motivated to succeed, but because of severe test anxiety

is barely able to stay in school and is about to have his plans to attend graduate or professional school ruined. Often students who suffer from test anxiety (which, like any phobia, does not yield to conventional "will power" methods or advice) blame themselves for the problem, thinking that they would not have it if only they tried harder or had more courage. Thus, the test-anxious student sometimes suffers from lowered self-esteem and general unhappiness as a result of his phobia.

Several studies have investigated the measurement and reduction of debilitating anxiety in a computer-assisted instruction context (Leherissey, 1971; Leherissey, O'Neil, & Hansen, 1971; O'Neil, Hansen, & Spielberger, 1969; O'Neil, Spielberger, & Hansen, 1969). The results of these studies have, in general, convinced the present investigator that high anxiety often interferes with performance on tests in a computer-based learning situation, but have discouraged the belief that available modifications in instructional design of the manner or presentation of test material will be substantially reduce test anxiety, especially in that sizeable minority of highly test-anxious individuals who appear in any student population.

Wishing to devise an automated test anxiety reduction program that could provide an inexpensive and efficient service for test-anxious students in a computer-managed instruction context, the author reviewed literature on test anxiety and its treatment for techniques or approaches that might be incorporated into or modified for such an automated program format. A selective review of the literature concerning the nature of test anxiety and its remediation by behavior therapy techniques may be found in Richardson, O'Neil, Grant, and Judd (1973). This review concludes with a discussion of the "cognitive-attentional" interpretation of test anxiety suggested by Wine (1971) and the "cognitive modification" approach to reducing test anxiety devised by Meichenbaum (1973). The present program draws heavily upon the theory and techniques suggested

by these authors. The program also includes several relatively novel approaches to assisting a student in coping with test anxiety. The principal components of the program and procedures students follow in completing it are described below.

In this program each student reads and completes some written exercises in a special type of manual on coping with test anxiety written for the program, the text of which is presented in this report. A number of prominent writers in the fields of psychotherapy and behavior modification have stressed recently that the straightforward provision of new information about behavior and the environment may be an overlooked but perhaps basic ingredient in most behavior change procedures (Lazarus, 1971; Murray & Jacobson, 1971; Urban & Ford, 1971; Sarason, 1972), one that could profitably be expanded and utilized in a more systematic manner (Sarason, 1972). Clients who receive one or another form of test anxiety treatment are usually treated in a manner based on some reasonably well-developed theory about test anxiety and its alleviation, but they are usually not provided with the full extent of available information about the behavioral and emotional dynamics of test anxiety and techniques for coping with it. Yet, in many cases, simply the provision of new and useful information about these matters may enable a student to modify his test-anxious behavior. Also, conveying this information in a permanent written form may be not only a more economical, but also a more effective way of making it available as a resource to the student. The manual developed for this program is a novel attempt to present comprehensive information about test anxiety and coping with it to anxious students in a manner most likely to assist them in implementing new behavioral strategies in the testing situation.

The manual is divided into three parts. The first part describes and diagrams the process whereby new information (e.g., that directing attention to the task instead of to oneself during tests lowers anxiety) may lead to new coping solutions for behavioral problems, and stresses

that intelligent adults are often able to utilize new, accurate information in this manner without the intervention of a professional helper. A brief section then presents some guidelines for the reader in the use of the manual, encouraging them to use imagination and fantasy in certain ways in absorbing the material, to be sure to relate the material to their personal experiences, and to complete the written portions of the manual which will aid them in working the new information into their behavioral functioning. This section simply restates accurately in non-technical terms the author's rationale and expectations for the manual as a treatment device. Several sample "case histories" of test anxiety in college students are recounted, giving an idea of the range of background events and symptoms commonly found in test-anxious students. Then the reader completes a test anxiety checklist containing a comprehensive list of symptoms of test anxiety in order to acquaint himself in detail with the manner in which high anxiety manifests itself in his behavior and thinking on tests. This part of the manual concludes with a relatively lengthy discussion of some different sources of test anxiety. It is claimed that high and debilitating anxiety on tests may usually be ascribed to (1) lack of ability or preparation, (2) lack of motivation or interest, (3) a reflection of other emotional or behavioral concerns, or (4) test anxiety. Test anxiety is defined as both a kind of automatic, habitual reaction of anxiety to tests which is difficult to control, and something the student actively does to himself in terms of self-oriented panicky thinking and fantasizing that generates high anxiety. Some detailed examples of lack of preparation, lack of motivation, and the intrusion of other concerns are given, for example, the instance of the student who is pursuing a major that was chosen for him by his parents, is resentful, has difficulty studying, and then gets anxious on tests. The solution in this case is to become aware of one's own wishes and resolve the conflict with one's parents, not treatment for test anxiety. The purpose of this section is to provide a self-screening procedure so that individuals for whom the program is not appropriate may deselect themselves from it. The assumption is made that in most cases students are capable of deciding for themselves whether or not the program is

appropriate for them. They are asked to make some written notes on the extent to which these various factors play a role in their test anxiety, and to decide whether any of the factors besides test anxiety play the predominant part in their difficulties with tests. If this is the case, they are told, they may wish to consult with a faculty member or professional counselor about the matter.

The second part of the manual provides detailed information about the behavioral and emotional dynamics of test anxiety, and about a number of strategies for coping with it. First, there is a discussion of anxiety on tests that makes the point that while there is good reason to be somewhat anxious about tests, especially in this society which places a great deal of pressure on its members to compete and succeed at school and work, there is no good reason for the capable and prepared student to panic or "freeze up" on tests. It is asserted that the only difficulty for such students is to cope adequately with the anxiety that is ubiquitous and quite normal on tests. Techniques for coping with test anxiety are discussed under four headings: (1) emotional state, (2) the direction of attention away from self and to the test, (3) eliminating anxiety arousing self-talk, and (4) the overall management of preparation, time, and pressure before and during the tests. A relaxation technique of slow deep breathing and procedure for practicing it are outlined for dealing with physical tension and related emotional arousal. The difference between self-oriented and task-oriented thinking on tests is discussed in detail and parallels in other behavioral spheres (such as social anxiety) are described. A number of illustrations of the process of task-oriented thinking on tests are given, such as using task-relevant fantasy and free association to assist recall, and stopping the process of reflection when a "best answer" is first determined on a multiple choice type test, avoiding further fruitless rumination. Exactly where and how self-oriented thinking usually enters the process is illustrated for the reader. In the section on self-talk, a number of examples of panicky self-instructions and self-talk (collected for this research by the author

from students' written records of their ruminations during tests, taken immediately after completing examinations) are provided for the reader, as well as a representative list of examples of appropriate self-talk that tends to focus attention on the test rather than oneself. In the section on overall management of time and preparation several general considerations regarding behaving in a manner that fosters a sense of control over the preparation and completion of tests are discussed. It is stressed that often behaving as if one felt calm and confident about tests often brings anxious feelings into line.

The third and final part of the manual contains a series of written exercises in which the student outlines for himself behavioral strategies for coping with test anxiety. For example, he generates a list of instances of panicky self-talk in his own case, and then develops a list of alternative, incompatible self-statements that might be used to counter anxiety and foster task-relevant thinking and behavior. And he is asked to follow certain guidelines (including review of previous written material) in devising several realistic strategies for fostering a sense of control and maintaining attention to the test in his own individual case.

Another component of the program exposes clients to a videotape presentation of a female student modeling effective and ineffective management of anxiety on tests. The videotape presentation is composed of the following segments: (1) a therapist briefly describes (five minutes) how panicky self-talk and inattention to the test or task interfere with smooth performance on tests for highly anxious students; (2) the tape (five minutes) displays instructions for operating a computer terminal and some of the intelligence test questions to be read and responded to by the model in the following segments, as they appear on the cathode-ray tube of a terminal in a computer-learning situation--this familiarizes the viewer with the exact nature of the task dealt with by the model, thereby increasing its meaning and informational value (Sarason, Pederson, & Nyman, 1968); (3) the model (10 minutes) approaches the terminal to

take a computer-based intelligence test, reads the instructions, and answers some test questions, exhibiting panicky self-talk (spoken out loud by the model), difficulty in attending to the task, worry about self and performance, and rising anxiety, eventually "freezing up" on the test; (4) the model (10 minutes) repeats the same sequence of approach, reading instructions, and answering questions, but this time exhibits appropriate self-instructions and self-talk that facilitate focusing her attention on the task and dealing with difficult questions, copes with anxiety and tension on two occasions taking several slow deep breaths, and generally conducts herself in a task-oriented and business-like manner, leading to positive results and satisfaction.

A third component of the program consists of a modified desensitization procedure along the lines of Meichenbaum's (1972) cognitive modification treatment for test anxiety. Subjects are given a half-hour of deep muscle relaxation instructions administered by a therapist on videotape and encouraged to practice the exercises at home. At a later date they are instructed by videotape to visualize themselves coping with mild anxiety in a graded series of test-taking scenes by slow deep breaths and the use of appropriate self-instructions to relax and pay attention to the test.

In the final component of the program clients practice responding to test-like questions at a computer terminal. Instructions presented by the CRT remind them of the slow deep breathing technique for combating physical tension and anxiety, and of the importance of paying attention to the test and avoiding self-oriented worry. They are encouraged to practice these anxiety management techniques while answering the questions. They are told that the questions come from a computerized intelligence test, but that their answers will not be scored. In fact they are given about half of the items, ordered from easy to hard, from the Computer-Based Slosson Intelligence Test (Hedl, 1971), which has been found to elicit high levels of state anxiety in subjects (Hedl, O'Neil, & Hansen, 1973), in a practice test-taking session lasting about 45 minutes for most subjects.

Technical Reports by Richardson, O'Neil, Grant, and Judd (1973) and Grant (1973) describe two experimental evaluations of the effectiveness of the test anxiety program in which the program was made available to high-test anxious students completing a sequence of five computer-managed instructional modules as part of an introductory educational psychology course. The results of the first study indicated that the program was highly successful in reducing the general test anxiety and momentary or state anxiety during module tests in eight test-anxious students. The results of the second study found the program only moderately successful in reducing high test anxiety in 47 additional students completing the same instructional sequence at a later date. There are some indications that certain subtle differences between the procedures employed in the two studies, which may have resulted in a somewhat "depersonalized" atmosphere during the second study, may account for the contrasting results. These studies, and current plans for research designed to resolve the discrepancies between them and develop improved procedures for administering the program, are described in Richardson and Grant (1973). Before presenting the text of the Manual on Coping with Test Anxiety, this report will briefly describe the basic treatment procedure followed in these two studies.

All students completing the module sequence during the semesters in which these studies were conducted were administered a self-report test anxiety questionnaire at the beginning of the sequence. Some of those students whose questionnaire scores indicated that they experienced a great deal of anxiety on tests were contacted and asked if they would like to participate in the program. If they volunteered for the program, students were asked as a first step to stop by the Computer-Assisted Instruction Laboratory office and pick up a copy of the manual. At this time they were scheduled for three one-hour sessions, on separate days during a one-week period, in a treatment room adjacent to the Laboratory. This room contained a videotape playback unit and monitor, a chaise lounge, and a single computer terminal.

The treatment procedure for each student (outlined on an explanatory sheet accompanying the manual) consisted of five parts: (1) reading the first two parts of the manual over the weekend; (2) attending the first scheduled session, consisting of watching an hour-long videotape, the first half-hour being the modeling sequence, and the second half-hour being deep muscle and slow deep breathing relaxation instructions; (3) reading the third part of the manual and completing the written exercises it contained; (4) attending the second scheduled session, consisting of viewing a second hour-long videotape presenting the modified desensitization component of the program; and (5) attending the last scheduled session of the program, the practice test-taking session at the computer terminal. A secretary on duty during that week at a desk just outside the treatment room checked subjects in and out, rewound the videotapes after each session using a tape, and showed students how to sign on at the terminal for the practice test-taking session. The program took about six to nine hours of each student's time, depending on the time and care with which they read the manual and worked on its written portion. Only three hours of this time, however, utilized Computer-Assisted Instruction Laboratory facility and staff time.

Students who completed the program in both studies reported, in a brief interview or on a questionnaire completed following treatment, generally favorable reactions to the program and the manual. It appeared from these comments that the manual communicated a great deal of useful information to readers. Most students found it interesting to read and remarked that its descriptions of the emotional and behavioral dynamics of test anxiety were close to their experience. A number of students remarked that they found the main points of the manual easy to remember for future consideration or application.

REFERENCES

- Alpert, R., & Haber, R.N. Anxiety in academic achievement situations. Journal of Abnormal and Social Psychology, 1960, 61, 207-215.
- Emery, J.R., & Krumboltz, R.D. Standard versus individualized hierarchies in desensitization to reduce test anxiety. Journal of Counseling Psychology, 1967, 14, 204-209.
- Eysenck, J.J., & Rachman, S. The causes and cures of neurosis. London: Routledge & Kegan Paul, 1965.
- Grant, R.D., Jr. Validation of an automated test anxiety reduction program. Unpublished doctoral dissertation, The University of Texas at Austin, 1973.
- Hedl, J.J., Jr. An evaluation of a computer-based intelligence test. Technical Report No. 21, Computer-Assisted Instruction Center, Florida State University, June 1971.
- Hedl, J.J., Jr., O'Neil, H.F., Jr., & Hansen, D.N. Affective reactions toward computer-based intelligence testing. Journal of Consulting and Clinical Psychology, 1973, 40(2), 217-222.
- Lazarus, A.A. Behavior therapy and beyond. New York: McGraw-Hill, 1971.
- Leherissey, B.L. The effects of stimulating state epistemic curiosity on state anxiety and performance in a complex computer-assisted learning task. Unpublished doctoral dissertation, Florida State University, 1971.
- Leherissey, B.L., O'Neil, H.F., Jr., & Hansen, D.N. Effect of memory support upon anxiety and performance in computer-assisted learning. Journal of Educational Psychology, 1971, 62, 413-420.
- Meichenbaum, D. Cognitive modification of test anxious college students. Journal of Consulting and Clinical Psychology, 1972, 39, 370-380.
- Murray, E.J., & Jacobson, L.I. The nature of learning in traditional and behavioral psychotherapy. In A. Bergin & S. Garfield (Eds.), Handbook of psychotherapy and behavior change. New York: Wiley, 1971.
- O'Neil, H.F., Jr., Hansen, D.N., & Spielberger, C.D. Errors and latency of response in computer-assisted learning as a function of anxiety and task difficulty. Paper presented at the annual meeting of the American Educational Research Association, Los Angeles, February 1969.
- O'Neil, H.F., Jr., Spielberger, C.D., & Hansen, D.N. Effects of state anxiety and task difficulty on computer-assisted learning. Journal of Educational Psychology, 1969, 60(5), 343-350.

- Paul, G.L. A two year follow-up of systematic desensitization in therapy groups. Journal of Abnormal Psychology, 1968, 73, 119-130.
- Paul, G.L., & Eriksen, C.W. Effects of test anxiety on "real-life" examinations. Journal of Personality, 1964, 32, 480-494.
- Richardson, F.C., & Grant, R.D., Jr. Development and evaluation of an automated test anxiety reduction program for a computer-based learning situation. Paper presented at the annual meeting of the American Psychological Association, Montreal, August 1973.
- Richardson, F.C., O'Neil, H.F., Jr., Grant, R.D., Jr., & Judd, W.A. Development and preliminary evaluation of an automated test anxiety reduction program for a computer-based learning situation. Technical Report No. 20, Computer-Assisted Instruction Laboratory, The University of Texas at Austin, January 1973.
- Sarason, I.G. Empirical findings and theoretical problems in the use of anxiety scales. Psychological Bulletin, 1960, 57, 403-415.
- Sarason, I.G. Experimental approaches to test anxiety: Attention and the use of information. In C.D. Spielberger (Ed.), Anxiety: Current trends in theory and research, Vol. 2. New York: Academic Press, 1972.
- Sarason, I.G., Pederson, A.M., & Nyman, B. Test anxiety and the observation of models. Journal of Personality, 1968, 36, 493-511.
- Spielberger, C.D. The effects of manifest anxiety on the academic achievement of college students. Mental Hygiene, 1962, 66, 420-426.
- Spielberger, C.D. Theory and research on anxiety. In C.D. Spielberger (Ed.), Anxiety and behavior. New York: Academic Press, 1966.
- Spielberger, C.D., & Katzenmeyer, W.G. Manifest anxiety, intelligence, and college grades. Journal of Consulting Psychology, 1959, 23, 278.
- Suinn, R.M. The desensitization of test anxiety by group and individual treatment. Behaviour Research and Therapy, 1968, 6, 385-387.
- Urban, H.B., & Ford, D.H. Some historical and conceptual perspectives on psychotherapy and behavior change. In A. Bergin & S. Garfield (Eds.), Handbook of psychotherapy and behavior change. New York: Wiley, 1971.
- Wine, J. Test anxiety and direction of attention. Psychological Bulletin, 1971, 76(2), 92-104.
- Wolpe, J., & Lazarus, A.A. Behavior therapy techniques. Oxford: Pergamon Press, 1966.

COPING WITH TEST ANXIETY: A GUIDE

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January, 1973

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PART ONE

INTRODUCTION

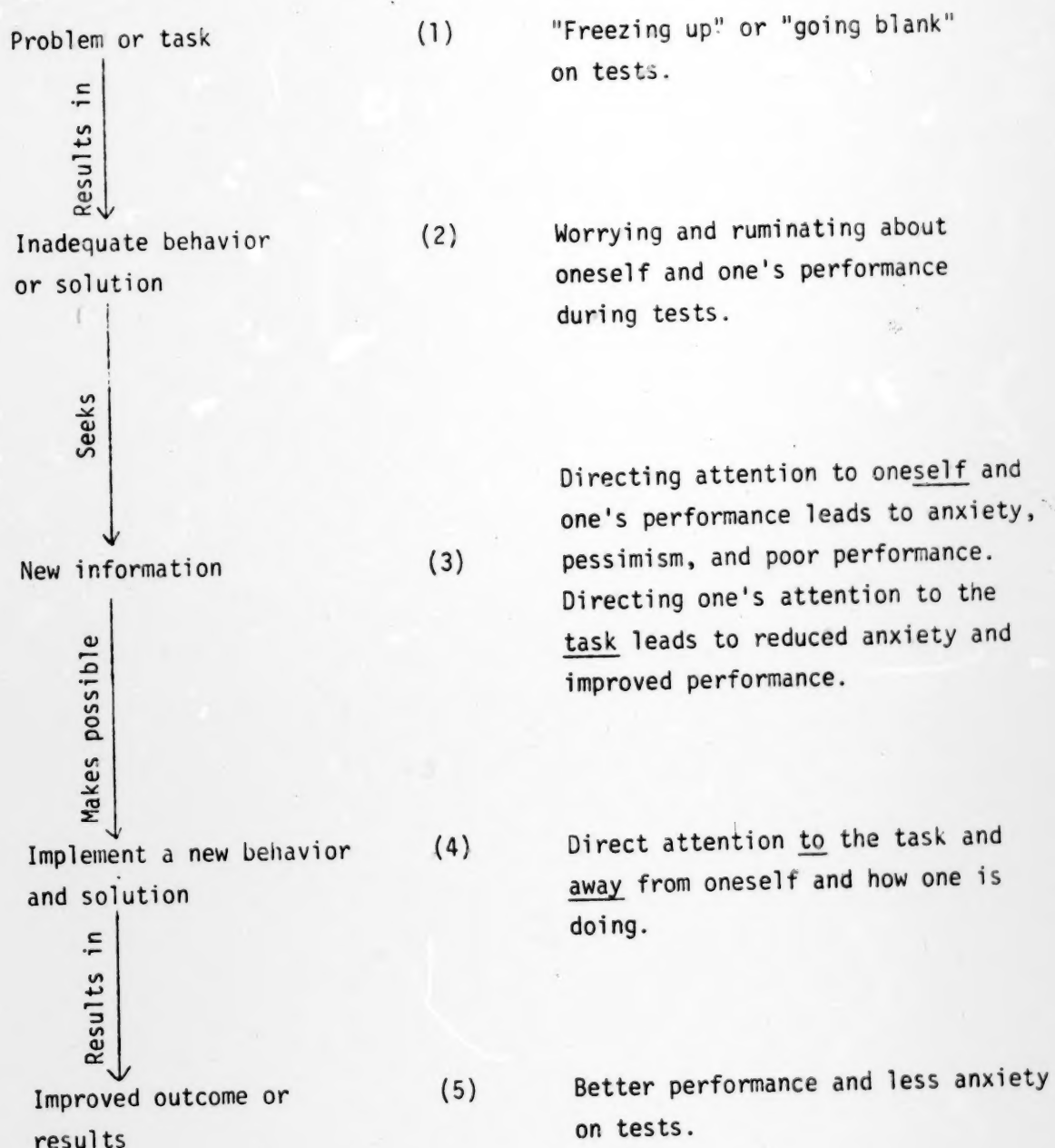
This guide or manual is designed to help you cope with test-taking anxiety. Test anxiety refers to the anxiety and tension you sometimes experience in academic testing or evaluation situations. Often this anxiety disrupts or lowers performance on tests. We will explain in much greater detail what test anxiety is, and how you can successfully cope with it, as we go along.

Before you begin to work through the manual, one very important idea must be stressed. Namely, it is essential that you read and work through the material in this guide in a slow and relaxed manner. Often in the following pages you will be asked to pause, consider a point, think something over for a few moments before responding, even close your eyes and imagine or visualize something for a minute. If you don't go slow, relax, and do this pondering and thinking over, the manual may not be useful to you.

To work through written material in this manner goes against our usual habits. Usually, when we read academic material we are under some pressure to move along as quickly as possible. Also, unfortunately, the material is often not very interesting, and so we tend to hurry or skim to get through with it. No claim is made here that this manual is as pleasant or exciting to read as a good science fiction or mystery novel, or whatever turns you on in the way of reading for pleasure. However, this material should prove genuinely interesting. It will be useful to you. And we are asking you to go slowly and "savor" the material, much like you might savor a very good novel that you hate to finish. This point is so important that we want to explain the basis for this approach, and illustrate it with our first exercise.

This guide or manual is based on what might be called a principle of "informational learning." In psychology and education we have recently gained a new appreciation for the fact that individuals are often able to change their behavior in a direction they desire if they are simply given accurate, useful information about the tasks or problem situations with which they are faced. We do not need to "protect" people from the reality or truth of the situation. They are not fragile. They usually understand psychological or behavioral principles quite readily if they do really make sense. Then, once they have accurate information, they can often make use of it to devise and implement new and better solutions to the task or problem at hand. They do not necessarily need an "expert" to lead them indirectly to a solution or to do it for them. Often individuals can profit a great deal on their own from new, accurate information. The primary goal of this guide is to provide you with this kind of information about yourself and test anxiety.

On the following page this process of informational learning leading to a new solution is shown in the form of a diagram. The steps of the process are indicated on the left. The example on the right in terms of test anxiety is only for the purpose of illustration right now. Look it over, but don't worry if it isn't clear--it will be explained in detail later.



It is not, however, an easy thing to acquire really useful information about human behavior or feelings. A superficial grasp of the facts is not enough. The information must be understood "in depth." It must be consistently "worked into" the whole area of thinking and behavior connected with the problem or task at hand--in this case, coping with test anxiety. Usually when you are reading or listening to take in information, you do not pause unless something really does not make sense. Instead, for the purposes of this program, it will be necessary to take it in in a much more slow and thoughtful manner. Some of the steps involved in "absorbing" information like this are the following:

RELAX--When you are relaxed (but paying attention, of course) you take in more, and it means more to you. Being relaxed facilitates all the following steps.

THINK IT OVER--Take the time to ponder and consider the ideas or facts carefully. Think it over until you get a clearer and more exact picture or understanding of what is meant. If the information is about a relationship between two things, test the idea out in your thinking. Don't be uncritical. But try to make positive sense out of the material so far as possible.

USE IMAGINATION AND FANTASY--Don't just "think" about the ideas or facts presented. Also picture them, and use your powers of fantasy and imagination to understand them better. You may wish to close your eyes for a moment and visualize yourself in the situation being described as a way of getting a better "feel" for it and testing out the information. The use of fantasy and imagination is not just an "extra," but one of the most useful tools you can use in absorbing information and relating it meaningfully to your own experience.

DRAW ANALOGIES--In addition to considering the information about test anxiety, relate this information to other areas of experience, your own and others'. For example, you may notice some parallels between the things people "say to themselves" when test-anxious and when anxious in a social situation, like asking for a date. Think through the parallel. Consider if what applies to the one situation might helpfully apply to the other. Notice any differences as well.

BE PERSONAL AND PRACTICAL--Be sure to relate this information through thinking and fantasy to your own personal experience. Consider whether or not something may have been true or an operating factor in the past with you. See if a point illumines your personal experience. Extend your thinking and imagining into the future in a practical way. Consider the practical implications of this new information for your active, realistic coping with test anxiety.

Numerous procedures and exercises in the following material have been designed to facilitate this process. Let us illustrate.

First of all, in the space below write down the name of some activity or skill at which you are particularly good or successful.

Fine. Now let us approach the same idea in a richer way. First, take at least 30 seconds to recall, from over the last five years, your most successful experience or accomplishment. (It may seem a small thing to an outsider, but really be an achievement and very satisfying to you.) Take 30 seconds to decide on this.

(30 seconds)

Excellent. Now that you have chosen an experience, please try the following. Take about a minute to visualize to yourself, with your eyes closed, the most satisfying moment of that experience. Play the situation through in your imagination, especially the most successful parts. Let the feelings of satisfaction, pride, and success that go along with this experience develop. Really try to feel and enjoy them.

(60 seconds)

Finally, consider this question for a moment. Which of the many activities you are currently engaged in, or might be engaged in, are most likely to lead to similar feelings of success in the near future. You may wish, also, to consider how you might best bring about this goal.

(60 seconds)

To be sure, this exercise is a little artificial and out of context. Nevertheless, these are real and important experiences and feelings. And this may give you a better idea of the difference between merely noting a fact (here a successful experience), and really considering and reexperiencing this quite personal event.

Remember, the key steps are:

1. Relax
2. Think It Over
3. Use Imagination and Fantasy
4. Draw Analogies
5. Be Personal and Practical

Now, before going further, look back leisurely over the first few pages of the guide (skipping actually doing the exercise). In the spirit of these steps, see if you have a good beginning feel for the way of proceeding that is being recommended. An attempt has been made to leave extra space throughout the manual for underlining or making notes, should you wish to do this.

Review

The rest of this introductory part of the manual provides you with some information to help you put your experience of anxiety on tests in perspective. This includes a section designed to help you distinguish between what we usually mean by test anxiety and other problems that can lead to difficulty with tests. The final two parts of the manual address themselves directly to coping with test anxiety.

Some Histories

The purpose of the next few pages is to provide some information about test anxiety by sharing with you some personal histories of difficulty with anxiety on tests. These are based on the report of individuals who have taken part in this type of anxiety reduction program.

Susan was an above-average student, a junior at the university, who was thinking about quitting school for a semester or two until she could do something about her problem with tests. Her first memory relating to anxiety was that in about the fourth grade she would get very anxious when her father helped her with her homework. He was very perfectionistic about her work and rather stern when she made a mistake, and he insisted that he help her often. Once she broke down and cried about this pressure during a homework session, and the problem gradually cleared up. Her father realized what was happening, and became much more supportive and let her work alone unless she asked for help. Nevertheless, this left a lot of feelings of tension associated with the evaluation of her schoolwork, and she recalled that tests were always unpleasant experiences for her. She would be edgy and sometimes get a headache the day before tests all through high school and early college. The problem began to get out of hand in her sophomore year when by mistake she took an intermediate chemistry course as part of her major program (biology, preparing for medical technology). She lacked the necessary prerequisites for this course. As a result, she flunked the first two tests, and had to drop the course. Despite reassurances from the professor and others that she could not have been expected to pass the course, she became depressed and began to experience a much increased fear of all tests. She got worse headaches before tests, and sometimes would become nauseated and unable to eat the day before an exam. It became more difficult to study and to actually concentrate and work on exams. Besides being very tense and tight, which she was used to, she would be overcome with a gloomy

pessimism that made it quite hard to work. As soon as she hit a question she did not immediately know the answer to on a test, she would become very depressed and give up. A few times she caught herself saying almost out loud, "I'll never be able to do it, I'll never get it," and then giving up. When the test was returned, however, she would look at that question and know the answer immediately. Her black mood began to carry over into the rest of her life. She spent a lot of time ruminating and thinking to herself things like, "I'll never be a good student, I'll never make it...What am I going to do?" Over and over throughout the day she would picture herself being stumped by a test question and becoming depressed over it. All this did was distract her from studying and make matters worse. At this point, Susan decided to put a halt to the problem somehow. There was no reason, she felt, to be unhappy all the time over tests, even if she had to quit school to stop it. She talked over her decision to leave school temporarily with a counselor and was referred to a test anxiety treatment program.

Paul was an average student who had always been regarded as having an easy-going personality. He didn't take school very seriously, usually working just hard enough to get a C or B on tests. He got a bit of a rude awakening his senior year in high school when his grades almost prevented him from going to college, and he resolved to study a little harder. Despite some increased effort he got a few D's and an F on some tests his first semester at the university. In fact, this was inevitable. The material was harder, his study habits needed improvement, and he did not know how to prepare well for tests. Normally he could and would have improved his study and test-taking skills and gotten back on the track. But, in the meantime, he developed a bad case of test anxiety. He spoke to a couple of his professors and got some good tips, but he had great difficulty fighting a growing mood of helplessness. He would go to tests 15 or 20 minutes early to see what people were talking about. All the worried conversation would raise his anxiety considerably. He found it hard to control a rising feeling of panic as someone would mention or make reference to something he did not know

right offhand. As the test began he would look around and become obsessed with the idea that everyone else had the material down cold, that only he was nervous and uncertain. The more he thought about it, the more it seemed true that others remembered and knew so much more than he did that it was hopeless to compete. Not only did this put him in a very bad way, but he could think of nothing to do about it. If there was a magic key to get out of his helpless state, he could not find it. For example, it seemed hopeless to try to guess what the instructor would ask on a test, though he would ruminate about it. Since that seemed hopeless, his studying became more aimless and disorganized. Then, on the test, he felt even more passive, helpless, and panicky. Toward the end of his freshman year, Paul noticed that he was beginning to feel very (as he called it) "paranoid" about tests. He was starting to imagine that a certain instructor was "out to get him." He recognized that these thoughts were very irrational. And from time to time the realistic awareness would break in upon him that except for his extreme anxiety he was really not much different from most of his fellow students. This awareness led him to respond to an advertisement for a counseling center test anxiety program.

Wayne was a very capable pre-med student at the university. He had always had a very nonchalant attitude towards school until the end of high school, when he became very serious about going to medical school someday. All of a sudden he began to take his studies seriously, almost with a sense of awe. He had a lot of confidence in his ability to start with, but gradually it was eroded by the difficulty he had with tests. His very serious approach to tests led him (without realizing it) to become extremely tense physically and mentally before and during exams. He would eat little or nothing at all for a day or two before the exam, often skipping meals to study. He would sleep only a few hours the two or three nights before a big exam. Sometimes he would stay up all night the night before the test. Of course, he couldn't study all the time, and so he would take naps and eat an occasional candy bar or hamburger. Objectively speaking, he saved very

little time with this panicky eating and sleeping schedule. During the test, as he worked on problems or questions, he would feel his thinking slow down to a painful snail's pace. He would have a general idea where he wanted to go with the question. But he could only think one small step at a time in a very effortful manner. As a result he could never finish a test, and received a lower grade. Even though he felt he knew the material, his low grades caused him to doubt himself. As his self-doubt increased, so did his test anxiety. Multiple choice questions used to be easy for Wayne. But sometimes, now, he would mark what seemed to be the right answer but then question it in a sudden rush of panic. Suddenly he could think of complicated reasons why any of the choices might be correct. He would frantically change from one answer to another, thinking to himself "My God, it could be any of these, there's no way to tell...I can't tell what he has in mind!" Once he happened to notice the way a fellow student marked a question as the student passed him to turn in his exam. Even though he had been sure of his answer up to that point, this filled him with doubt. He could not keep himself from changing the answer. When this particular test was returned, he noticed that his original answer was correct, and the reason why seemed obvious. Also, he noticed that almost all of the answers on the multiple choice part of this test that he had changed were changed from a right to a wrong answer. In his junior year Wayne's problem became acute. Despite all his efforts he only had a 2.5 grade point average (on a scale of 4), which was not nearly good enough for medical school. Since his efforts were not being rewarded he found it difficult to study, and, in fact, he began to study much less. A couple of times this led him to a most unexpected result. On two tests he received an A and a B+, much better than usual, when he had not studied at all but merely relied on his general familiarity with the subject matter. This puzzled him greatly, but it did not help. He started to think that perhaps he was not studying and doing well because he did not really belong in college or was mistaken in thinking that he wanted to go into medicine. He requested vocational counseling, and the real problem

became clarified. The first thing he learned was that the reason he did well on those two tests was that, having given up, he just relaxed and put down what he thought made sense. With some assistance in coping with test anxiety his grades improved sufficiently during his last two semesters, and he was able to score well enough on the medical school entrance exam, so that he was able to realize his career ambitions.

The experiences these people had with test anxiety may have been more severe than yours. But they illustrate many common aspects of the problem. You might be interested in knowing that there is good evidence to suggest that as many as 15 to 20 percent of college students experience test anxiety to the degree that it causes serious discomfort and often interferes with their performing up to their ability on tests. At least half of all college students have troublesome anxiety about examinations occasionally according to the best information we have.

Test Anxiety Checklist

Below you will find a list of some of the more common "symptoms" or components of test anxiety. Please look over the whole list once, rapidly. Then, go through the items and indicate on the right how often you experience these signs of anxiety. You may notice that these components of test anxiety divide up roughly into two categories: (1) Emotional aspects such as tension, nausea, rapid heart beat, etc., and (2) Cognitive or "thinking" aspects, such as worrying about how one is doing, thinking about the consequences of doing poorly, etc. Space has been left at the end for you to record additional symptoms of test anxiety which you may experience but are not included here. Put down even minor variations on the items listed to make an accurate record of your reactions. You will be making use of this material later in the manual. Take your time. Try to recall vividly your experiences with tests and preparation for tests.

(Circle one)

	None	A little	A fair amount	Much	Very much
Feelings of physical or muscular tension during studying or tests.	1	2	3	4	5
Difficulty in remembering material on exams.	1	2	3	4	5
Difficulty in thinking on tests: organizing answers, reasoning, solving problems, etc.	1	2	3	4	5
Heavy sweating. For example, of palms or face.	1	2	3	4	5
Difficulty comprehending fairly simple sentences or instructions.	1	2	3	4	5
Disturbing, panicky feelings of not having enough time to finish.	1	2	3	4	5
Thoughts or fantasies of being inadequate, a poor student, stupid, "no good," etc.	1	2	3	4	5
Rapid breathing or difficulty in breathing.	1	2	3	4	5
Rapid heart beat or pounding.	1	2	3	4	5
Feelings of anxiety, fearfulness, or panic before or during tests.	1	2	3	4	5
Inability to pick between alternatives where a choice is called for.	1	2	3	4	5
Thinking processes become very slow and effortful.	1	2	3	4	5
Thinking processes become very speeded up, but unclear or inaccurate.	1	2	3	4	5

(Circle one)

	None	A little	A fair amount	Much	Very much
Trembling during tests.	1	2	3	4	5
Thoughts or fantasies about disapproval or punishment or humiliation to follow doing poorly on a test.	1	2	3	4	5
Self-critical and self-condemning thoughts during tests.	1	2	3	4	5
Disruption of patterns of eating and sleeping before exams.	1	2	3	4	5
Worried thoughts about how well you are doing on the test.	1	2	3	4	5
Worried thoughts about how well you are doing in relation to others on the test.	1	2	3	4	5
Headaches before or during tests.	1	2	3	4	5
Difficulty in focusing attention or concentrating on the test.	1	2	3	4	5
Feelings of pessimism, fatalism, or helplessness about the outcome of the test.	1	2	3	4	5
Losing confidence in your ability or judgment to answer a question.	1	2	3	4	5
Being preoccupied with nervous bodily reactions (like sweating).	1	2	3	4	5
Difficulty in sleeping before exams.	1	2	3	4	5
Nausea before or during tests.	1	2	3	4	5
Making mistakes on very simple matters, e.g., adding 9 and 3 and getting 11.	1	2	3	4	5

(Circle one)

	None	A little	A fair amount	Much	Very much
_____	1	2	3	4	5

_____	1	2	3	4	5

_____	1	2	3	4	5

_____	1	2	3	4	5

_____	1	2	3	4	5

_____	1	2	3	4	5

Please be assured that these "symptoms" of anxiety in testing situations are not abnormal or strange. They are the kinds of things people normally experience when they are under stress that is difficult to handle, or are very anxious. As you have probably noticed, they usually pass away quickly, including the irrational thoughts, when the test is over and the situation changes. Also, it is quite possible to learn to control anxiety of this kind--when you know how to go about it.

Some Different Sources of Anxiety on Tests

Before directly explaining test anxiety and some effective ways of coping with it, there is one other matter to discuss. Anxiety in testing or evaluation situations may come from several different sources. The vast majority of "freezing up" or high anxiety on tests is due to simple test anxiety for which this program is designed. Nevertheless, you should be informed that anxiety on tests may be due to other causes and given the chance to determine if this information applies in some way to your situation. Even if it does not, this background information will be useful in getting a broad view of the situation before designing your own approach to coping with test anxiety.

Anxiety on tests may represent:

1. Lack of Ability or Preparation
2. Lack of Motivation or Interest
3. A Reflection of Other Emotional or Behavioral Concerns
4. Test Anxiety

In fact, some anxiety is normal on tests, and different factors like these often play some role in our reactions. Everyone is unprepared sometimes, lacks motivation for a particular course, or is going through a bad time, and has other problems and concerns. However, if factors 1, 2, or 3 play a consistent and predominant part in your difficulty with tests, this test anxiety program may not be appropriate for you right now. Some other course of action or form of counseling might be more helpful.

We consider carefully the following brief descriptions of these different factors.

1. Lack of Ability or Preparation

Sometimes an individual will become very anxious when he has to take a test for which he or she has not prepared well, or at all. This may lead, quite naturally, to feelings of anxiety or helplessness. The intensity of these feelings may surprise and somewhat frighten this person. Unless it persists and occurs in other testing situations where preparation is adequate, it is not test anxiety. Please consider what role lack of preparation has played in testing situations where you have experienced anxiety. You need to consider not only time spent, but the manner of preparation. There are certain preparation skills, such as organizing study time and materials, developing useful notes and outlines, and so forth. In some cases it may be easier to think in terms of test anxiety than face the hard facts of lack of preparation and what may be required to remedy it. But, of course, this works to your disadvantage over the long run.

Similarly, anxiety may occur when a person has to take tests over coursework that he does not have the ability to handle or master at that time. In such a situation, all the preparation in the world may not help. It may be a little painful or disappointing to have to realistically reassess one's abilities in a case like this. But focusing on the anxiety rather than the present lack of skills or ability will not improve matters. It may be possible to take steps to improve one's skills and then return to the task.

A word of caution--it is sometimes difficult to distinguish the lack of present ability from the problem of anxiety interfering with learning or performance on tests. For example, many people assume they have "no talent" for mathematics, when in fact it is fear of math and working with numbers that limits them, not lack of basic ability. You need to be honest with yourself about your present abilities if you are experiencing repeated frustration and anxiety in connection with certain courses or material.

However, if you are interested in a certain subject and see no obvious reason why you should not be able to cope with it, then it is probably best to assume that you have the basic ability to deal with it and explore the possibility of test anxiety.

Another important point--sometimes lack of preparation or ability can lead to a strong anxiety reaction to tests that continues even when you are prepared and have the necessary skills. A sharp anxiety reaction in a situation can leave you with a "phobia" or fear that tends to automatically crop up when you are again confronted with that situation--even when there is no longer any problem or reason for fear, objectively speaking. If this happens (as it did in different ways in the cases of "Paul" and "Susan" above), this continuing reaction of anxiety is test anxiety, and the approaches described below for coping with it are quite appropriate.

2. Lack of Motivation or Interest

Lack of motivation or interest may lead to lack of preparation or effort, and then to anxiety on tests. It may be lack of interest or motivation concerning a particular course, a subject, or the whole business of college work and life at a given time. In fact, there are no "shoulds" or "oughts" in matters like these. At a given time many college students would probably be better off leaving school for a shorter or longer time to pursue other activities. But, because of the pressure of these "shoulds"--including, perhaps, what they assume family or others think is best or right--they either do not get in touch with their real interests at present or they don't act on them. Instead, they continue to try to whip up motivation to do work that is not appealing. They try to maintain a high level of performance in an activity that does not really interest them. This is either difficult or impossible. Often they interpret their inability to perform well or energetically as a lack of ability or even a personal failure

of some sort. This may lead, of course, to an even greater aversion to taking tests. The state of being "unmotivated" can be puzzling and anxiety-provoking if it is not seen for what it is. It is always a mistake to blame yourself for not being motivated or interested in something. And lack of motivation usually is not a sign of some serious emotional conflict or problem. However, boredom or lack of motivation is, like anxiety in the face of real danger, a sign that you are not on the right track and need to rethink what you are doing. Please consider what role lack of motivation or interest may have played in the anxiety you have experienced in testing situations.

3. A Reflection of Other Emotional or Behavioral Concerns

Several kinds of emotional problems or concerns may contribute to anxiety on tests. These problems may be emotional, interpersonal, or value conflicts. They all have one thing in common--they are problems quite separate and different from the problem of managing anxiety on tests. They must be resolved usually before test anxiety, if there is any, can be dealt with. Often when they are cleared up, anxiety on tests disappears as well. These problems are much less common than simple test anxiety, and we hope reading about them will not cause you to "read in" problems that do not exist. Still, consideration of these factors may clarify for you, even if only by contrast, the kind of difficulty you have with tests.

Sometimes a student will be attending college, or pursuing a certain major against his true preferences and desires. He may, for example, be under a great deal of pressure from parents or family to stay in school or pursue a certain career. He may not be able to assert his quite different wishes--to leave school for a while, or delay a choice of major or career--in the face of this pressure. In spite of considerable tension and unhappiness, he may understandably be afraid of facing up to this conflict of wishes, which could lead to severe conflict and unpleasantness. He may not even

realize clearly what his true preferences are or be aware of the conflict with others. Still, the tension continues, and he needs some solution. The only solution that gives him a way out of the conflict may turn out to be "failure" in certain courses--which leads to a change in major or leaving school temporarily. He may, often quite unconsciously, hit upon the course of action of becoming so distraught and anxious on tests that he cannot complete them, thereby failing the course. This does not make a person dishonest or a malingerer. Nor does it necessarily indicate any serious personal maladjustment. It just means that he was temporarily overwhelmed by a conflict situation to which he could not find a satisfactory solution. However, the individual pays a high price for this unsatisfactory solution. He loses in terms of grades and a sense of self-determination. And the conflict with parents or others will soon crop up again in other forms until it is dealt with. In a case like this a program for coping with test anxiety by itself would not help, for the anxiety is a symptom of another problem that will have to be dealt with in its own right.

The true mark of a problem of this type is that test anxiety and its effects, however painful, do bring about some consequences or results that are desirable to the person or solve some problem for him. The benefits may be only short term, followed by greater difficulty in the long run. But they do constitute a kind of "reward" for the disruptive anxiety on tests. What is needed is not help with test anxiety, but help in finding a better solution to the original problem or conflict. In the case just described this might mean learning how to stand up for one's rights and assert oneself to one's parents and family. Usually this not only solves the problem about major or career choice for the individual, but leads to an improved relationship with his family.

A conflict in the realm of values may lead to difficulty with academic work and tests. For example, a young woman may be keenly interested

in pursuing a career in mathematics or one of the physical sciences. But she may be conflicted about this goal because of some inherited values which hold that these interests are "unfeminine." She may experience this conflict especially sharply as she performs on tests, which are a kind of focus for academic and career striving. Her mixed feelings at this point may interfere with performing on tests in a way that resembles test anxiety. Obviously, clarification of her values and some information about changing standards concerning what is "feminine" will clear up a problem like this. Test anxiety is not the primary difficulty.

Some people have difficulty relating to persons in authority, so-called "authority figures." Perhaps because of past experiences which may have been uncomfortable or punishing, they experience disruptive emotional reactions, typically a lot of fear and anger, in dealings with authority figures. Instructors are authority figures, and taking tests involves interaction with and evaluation by them. Therefore, these emotional responses may crop up on exams and interfere with smooth performance. A test anxiety reduction program may be helpful in some of these instances. But definite attention should also be given to getting a more realistic picture of persons in authority and to learning how to better relate to and cope with them as people.

Infrequently, but occasionally, anxiety on tests may be a symptom of more serious emotional problems. A very common ingredient of such problems is low self-esteem--low self-confidence, self-hatred, excessive self-criticism, extreme perfectionism--often accompanied by persistent feelings of depression and despair. These feelings will not allow a person to apply his energies effectively in the academic sphere. Feelings and thoughts which reflect self-disapproval often become a self-fulfilling prophecy. They interfere with the sense of reasonable self-confidence and the application of one's attention and energies to the task at hand, successful learning and test-taking. This may lead to poor performance, and then to an even more critical view of oneself.

This kind of pattern of depression and self-defeat can be broken. Psychological counseling may be helpful to this end. Learning to cope with test anxiety by itself, however, would not be enough.

4. Test Anxiety

What test anxiety is, and how to cope with it, will be discussed at greater length in the following sections of this manual. A brief account of its chief features is provided here in order to help you complete your consideration of these different factors.

Test anxiety has two different sides to it, or it may be viewed in two different ways: (1) It is a strong emotional reaction of fear or anxiety that interferes with remembering and thinking clearly on tests. Often we picture this aspect of test anxiety as a wave of fearful emotion that starts in the gut and eventually clouds the mind. Usually there is some physical sign of anxiety, like rapid heartbeat or profuse sweating. Often one seems to suddenly "freeze up," unable to think clearly any longer. This is often experienced as an involuntary, automatic reaction of anxiety, whether growing or sudden. It seems impossible to control or lessen by "will power" or trying to talk oneself out of it. It seems to be a kind of "conditioned response," an automatic response of anxiety to testing situations. Test anxiety can have a reflex-like character like this. And ordinary methods of trying to control oneself and one's emotions fail. The result of this is the symptoms of test anxiety you checked in the previous section above. However, test anxiety is not only something that happens to you in this manner. It is also something you actively do to yourself.

(2) Besides being a habit reaction of anxiety, test anxiety is also several patterns of ineffective coping with the inevitable stress and anxiety of a test or evaluation situation.

One of these patterns involves increasing physical discomfort, tension, and bodily signs of anxiety. For example, you may feel very tense physically and emotionally. This is uncomfortable, and it may begin to interfere with your concentration or thinking clearly. Then, in response to this tension you may try harder to concentrate. You may fight to concentrate or try to overcome the tension in a way that actually increases the discomfort and tension. Tensing up and trying to fight one's way through the tension tends to only add to the problem.

Another pattern involves the way you think and "talk to yourself" about the situation. You may be apprehensive and anxious about the test, let's say just before the exam begins. You are worried about doing poorly and perhaps also worried about freezing up on the test. Your response to this apprehension (which everyone shares to some degree) may be to keep on picturing to yourself the worst that can happen. You imagine or picture not knowing answers, failing, being ashamed or humiliated if you do poorly, freezing up on the test, over and over. Your imagination tends to run away with itself, and you end up much more frightened and worried than when you started out--before anything bad has even happened!! In a sense, you mentally practice freezing up on the test. You do not simply wait to see what happens. You do not think about equally possible positive outcomes of the test and anticipate them with pleasure (that's possible, believe it or not). You do not, in this pattern, take truly effective steps to direct your thinking in a more rational and realistic direction. You may tell yourself that it is "silly" to get anxious and that you "should" not react that way. This, of course, does not help. It is not foolish or irrational to become somewhat anxious on tests, and it is not easy or automatic to manage this anxiety successfully. All thinking this way does is give you an additional reason for putting yourself down and feeling incompetent!

Another very important pattern closely related to how you think and imagine in the situation involves the direction or focus of your attention.

In this pattern you direct your attention towards yourself and away from the test and the activity of dealing with it. Ideally, you would be very "task-oriented" in your test-taking. You would be involved in thinking about and answering the test questions, with very little of your attention going to other matters such as yourself, others in the room, the instructor, the surroundings, other concerns, etc. But as you begin to get anxious, more and more of your attention gets directed not to the task, but to yourself. You may become preoccupied with any bodily symptoms of anxiety and think about them. You may worry and ruminate about whether you studied enough or the right things, whether you are good enough, what will happen to you if you do poorly, and so forth. This takes valuable time and energy away from the task of dealing with the test. It lessens the chance that you will have good ideas and deal successfully with the test questions in ways that will increase your confidence and help you relax. We all know what it is like to "lose oneself" in a task, like working with machinery, or an absorbing puzzle, or an engaging hobby or craft. Instead of losing yourself in the test-taking task you pay attention to and worry about yourself.

So--test anxiety is an habitual, hard-to-control reaction of anxiety and fear to tests and thinking about tests. And it is certain patterns of coping with anxiety in the testing situation which only tend to take your attention away from the task and increase anxiety. Test anxiety may get started from a situation where you were unprepared, and then continue even when there is no reason for excessive anxiety. A certain amount of anxiety is inevitable and normal on tests. Test anxiety is simply difficulty in coping with anxiety in the testing situation--not a result of poor preparation or a reflection of difficulties in coping with other forces or people in one's life.

In the space provided below would you please write some notes to yourself in response to the following question: To what extent, and in what way, do you feel that your difficulty with anxiety on tests reflects a lack of preparation or ability at the time? Responses are usually things like: tend not to study for essay exams and find it harder to B.S. than I thought--don't really know how to get down the basic principles on math tests, get lost in detail and then very anxious on test--really should think about whether cramming works in some courses--etc. (From here on there will be a number of brief, written exercises like this one. Please take a minute or two to honestly analyze the situation to yourself and then write out a response. A great deal of the effectiveness of this program depends on conscious analysis and actually articulating a brief response on paper.) You will be referring to these notes later in the manual.

In the space below would you please make some notes to yourself in response to the following question: To what extent, and in what way, do you feel that your difficulty with anxiety on tests reflects a lack of motivation or interest. A typical response might be: neglect courses that don't interest me and that's where test anxiety is really bad, need to rethink that since tends to make me uptight on all tests, I think--don't know where I'm going with school right now, makes it hard to study sometimes--etc. Please make brief note of any possible aspects of this issue that come to mind.

Finally, please consider to yourself this question: Do you feel that other emotional or interpersonal concerns are playing a part in your current difficulty with anxiety on tests. If your answer is "yes," you may wish to consider talking over these concerns and the role they may play in interfering with your academic work with your instructor or a professional counselor. Please continue with the manual if you feel it would be of benefit to you.

Background and History Exercise

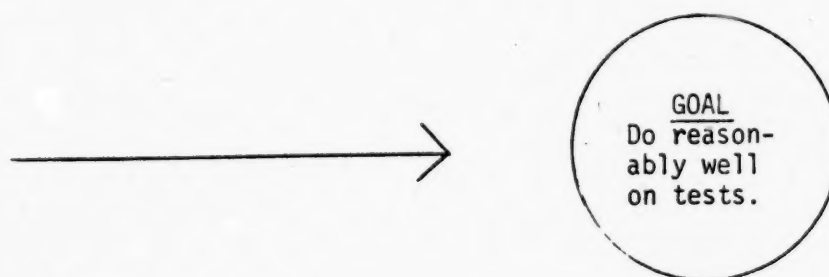
Before going on to Part Two of the guide, this exercise is designed to help you pull together and make concrete your thinking to this point. In the space below (including the following pages) please write your own "case history," similar to the case histories of the three students presented above. Of course, yours will be in the first person. Include any relevant background (there usually is some). Give some specific details concerning how anxiety currently interferes with your preparation for tests and test-taking. Do not hesitate to write more detail or a longer account than the samples given above.

PART TWO
COPING WITH TEST ANXIETY

This part of the manual is designed to provide you with the new, accurate, detailed information you need to begin to cope with test anxiety. Please take the time to slowly and thoughtfully consider this information.

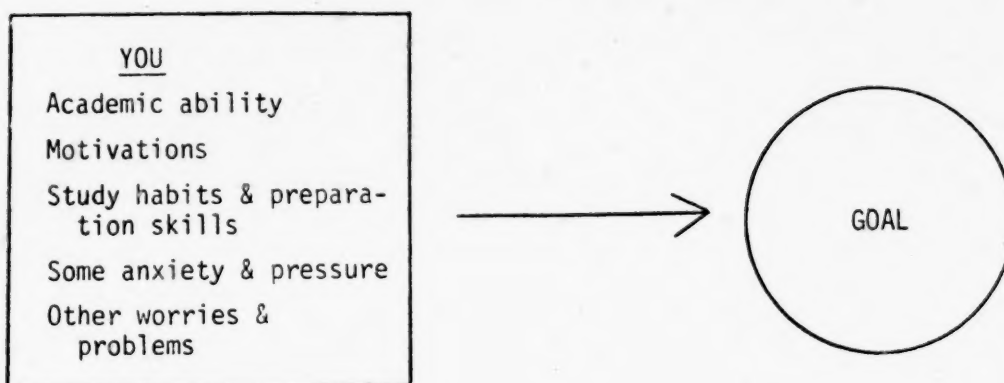
Understanding Test Anxiety

The basic idea is simple. We can probably assume that one of your goals is to do reasonably well on tests. That does not necessarily mean you wish to get all A's, even if you could. You just wish to perform reasonably close to the level of your ability much of the time. If this is true, then you are faced with a task or problem--to get to this goal. The situation might be diagrammed like this:



Of course, this goal is not reached automatically. You don't start at the goal and may encounter problems or obstacles on the way. Where you do start in relation to this goal might be diagrammed like this:

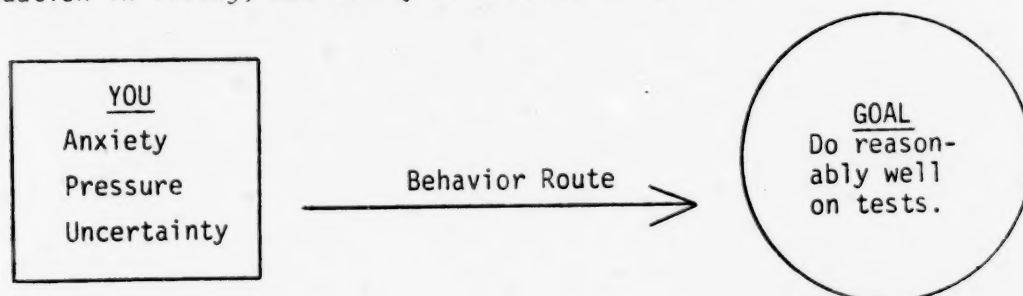
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How easy is it for you to travel the behavior route from start to goal? What might make this movement difficult? We have already determined that a number of the factors that may lead to high anxiety and poor performance on tests are not the primary cause of any difficulty you may have with test-taking. You have the basic skills to do well. You are not, in general, lacking in motivation. And the troublesome anxiety you have on tests is not a reflection of other concerns that would clear up when these other problems were resolved.

What this leaves is the likely possibility that you have some difficulty in coping with the anxiety and pressure of a test or academic evaluation situation. Some anxiety, pressure, and uncertainty are always there. You may experience more than usual to start with because of some pressures or experiences in the past. In any case, it is not easy to cope with this kind of anxiety--it gives everyone trouble at times. As we mature and face increasingly complex social and academic tasks, we learn something about coping with anxiety--you have, or you would not be where you are. Unfortunately, however, we are not usually taught that coping with anxiety and pressure is a basic skill that one requires to function or live effectively. It is usually not identified as a basic skill that needs to be mastered, like learning to spell or carry on social conversation. One

result of this is that any helpful advice, guidance, or training we receive is likely to be very spotty and unsystematic at best. Another result is that when people have difficulty in this area, instead of seeing it as a common problem to be solved or skill to be learned, they blame themselves for being anxious and feel that there is some wrong with them for having any difficulty. So--the following situation is a basic, common problem situation in living, not easily or automatically solved:



Let us look in a little more detail at this problem situation. The basic point is twofold: (1) There are a number of reasons for feeling somewhat anxious about tests, and (2) There are no good reasons for feeling so anxious that you freeze up and can't function adequately in the testing situation.

One main reason that some anxiety is associated with tests is the obvious fact that usually doing well on tests is followed by rewarding and pleasant consequences, while doing poorly is followed by punishing and unpleasant consequences. The possibility of doing poorly is usually present. Therefore, some anxiety about the negative consequences is virtually inevitable. Some of the common, realistic, positive and negative consequences that may follow good and bad performance on tests are listed below. Look these over carefully.

Positive (doing well)

Greater likelihood of good grade in course.

Enhances progress in major or course of study.

Improved academic record which may positively affect job or career plans.

Receiving praise and admiration from others for good job.

Praising and feeling good about oneself for doing well.

No extra work or inconvenience or loss of time--may even get some privilege or avoid work.

Negative (doing poorly)

Lower likelihood of good grade in course.

Slightly retards progress in course of study.

Poorer academic record which may negatively affect job or career plans.

Receiving no praise, rarely criticism or disapproval.

Perhaps criticizing and feeling bad about oneself for doing poorly.

At times some extra work, inconvenience or loss of time.

The list on the right are real factors which may lead to anxiety. It may seem obvious to list them, but it is important to get a realistic fix on these negative consequences. Often people worry and fantasize about consequences that are not realistic, but unlikely and extreme. Doing this is one result of not coping with anxiety and letting it get out of hand. We must clarify further what is realistic and what is not.

On the average, the risk of doing poorly on a given test (and incurring negative consequences) is very slight. If you are reasonably well prepared, there is no reason you should do poorly. Therefore, you are not faced with a high risk situation which might justify high anxiety. You may occasionally have bad luck in terms of particular questions asked or topics covered, but if you are prepared, that is uncommon. You may make some sort of error in connection with a particular test. For example, you may not have studied for the right thing, or misread an important question, or mismanaged your time on a test. You may have to make some adjustments in giving

a particular professor "what he wants." But all of these problems can usually be diagnosed by carefully analyzing what happened, and can usually be corrected by the next test. Even if a test exposes a more serious deficit, like difficulty in writing clear essays, most colleges and universities have resources for developing the needed skills to correct the problem. You may just need more experience. You may run into a problem--but it can usually be solved. There is no continuing factor of risk to justify high anxiety.

Doing poorly on a particular test rarely means flunking a course. Often it need not even lower your grade in that course. Most instructors and professors are very responsive to any student who wishes to figure out and correct problems he is having with the course and rarely will hold a single grade against him. Many good people avoid seeking out the instructor to let him know they have had some difficulty and are taking steps to correct it and to ask for his opinion and assistance. Yet, often, that is the one thing that will secure effective help. You will usually be respected and rewarded for your efforts. Often students discover that the prof is concerned about the effectiveness of his teaching (he often gets little feedback about his efforts) and is complimented that you sought him out! It is true that often an instructor will not completely understand the problem or know what to do about it, especially if the problem was test anxiety or freezing up. But if you honestly describe your difficulty, making neither more nor less of it than it really is, indicate what steps you are taking, and ask his advice, you will almost always meet with real respect. If you find yourself thinking things like, "I really shouldn't bother him, he's probably very busy," or "I'll be embarrassed and look foolish," you should reconsider. Are you really concerned about the professor or about losing face? Or are you perhaps avoiding taking the realistic, responsible step of facing the difficulty squarely and dealing with it? Your respect and admiration for someone else who had a course problem, even test anxiety, would probably increase if you observed him talking the problem over with his instructor. Everyone has

problems in connection with their academic work or professional functioning, including your professors. The important differences among people have to do with how they deal with them. Test anxiety is not yet as widely understood as other academic difficulties, but this and almost all other course problems can be readily solved. The main point is that even flunking a test is no cause for undue alarm.

A related reason for anxiety on tests has to do with the tremendous emphasis placed on competition, performing well in school, and work-related achievement and success in our society. There is growing agreement that this one-sided emphasis on individualistic competition and success via academic and work achievement is destructive. It neglects other at least equally important values and aspects of human living. It actively interferes with cooperation, friendship, community, mutual sharing and trust, to mention a few. In fact, if we were less competitive, we might be even more productive in ways that really matter, in education, business, science, and other areas of life and culture. An over-emphasis on success through competition leads to fear of failure. This fear often ruins performance, producing failure. In some ways this fear of failure is realistic, for the competitive system in school and society is often set up so that only a few can reap the top rewards. High school students, and now even some grade school students, become driven and preoccupied with grades. Everything is subordinated to the effort to get high marks in order to gain entrance to college, professional schools, and jobs. Students tend to see their performance in school as a measure of their worth as people. Of course, grades, status, and external marks of success have little or nothing to do with human worth or happiness, and by themselves are rather hollow rewards. The fact remains, though, that great pressure is placed on students to do well and succeed in school, and this is an important source of tension and anxiety about tests.

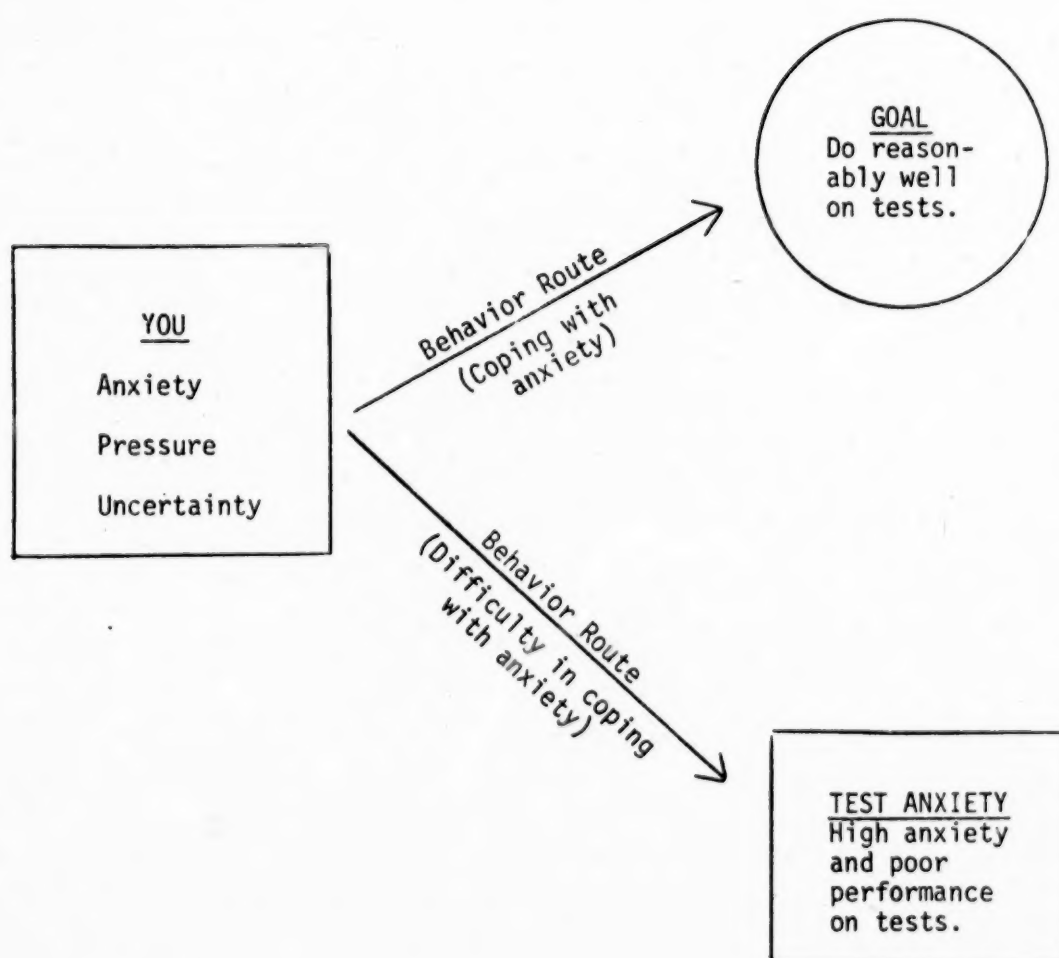
It is hoped that test anxiety programs like this one will not become a support for a bad system, helping to maintain it by dealing with its

casualties instead of changing the system. There probably should be less emphasis on individualistic competition in education. Alternatives like pass/fail systems are being tried out. Educators are experimenting with other forms of evaluation besides tests. Ways are being discovered to make tests themselves less anxiety-producing and more of a meaningful, learning experience. The knowledge we have gained recently about test anxiety will probably accelerate change along these general lines. In the meantime some tests, and some anxiety, are inevitable. Despite the pressure and competition, there is no necessity for test anxiety. It is not the pressure itself, but difficulty in coping with it that causes the trouble.

Another reason for some anxiety on tests is that test-taking involves uncertainty. One usually does not know what a test will contain, exactly how hard it will be, etc. It is normal to be a little anxious, alert, "on guard" in the face of uncertainty. To be sure, too many tests are guessing games where it seems as if the student and instructor are competing to see who will "win" the game. This tends to lead to excessive pressure and a feeling of mutual antagonism which do not enhance learning. Often the route of correct preparation should be clearer to students. Tests should be more predictable. And tests should be seen as an opportunity to demonstrate what you do know, not find out what you don't know. Still, it is possible to cope very adequately with the uncertainty and anxiety involved in test-taking. Excessive anxiety does not help resolve the uncertainty and can be avoided.

Finally, it should be noted that some anxiety is useful and plays a positive role in test-taking. Being alert, a little bit aroused, and a little anxious are all part of a normal state of readiness to concentrate and perform well on a challenging task. There is evidence to suggest that on tasks similar to classroom tests no anxiety leads to only average performance, a little anxiety leads to the best performance, but much anxiety leads to a disrupted and poor performance. Some anxiety increases one's alertness and facilitates one's ability to concentrate on the task and perform at a steady and moderately high rate. Most test anxiety results from letting this normal and useful anxiety get out of control.

To build on our former diagram, then, there are two possible outcomes for you in a test situation:



Coping with Test Anxiety

At this point we need to look closer at what is involved in these two behavior routes. There are four main factors involved in coping with anxiety on tests. You might think of test-taking as a long process of behaving and thinking which begins at the point of knowing there will be a test and ends with completion of the exam. It is useful to think of this process as having four main sides or aspects. You might think of a single rope with four interwoven strands, the strength of the rope depending on the strength of the individual strands. These four factors are: (1) physical and emotional state during test-taking; (2) directing attention to self or task during tests; (3) use of self-instructions and self-talk on tests; (4) overall management of preparation, time, and pressure. Or, more briefly:

1. Emotional State
2. Direction of Attention
3. Self-Talk
4. Preparation Management

Handled one way each of these factors or behavioral strands leads to smooth performance. Handled another way the result may be test anxiety. In the rest of this part of the manual we will spell out how managing these factors determines the two different behavior routes. In the final part you will have the opportunity to use this information to program for yourself a behavior route of coping with test anxiety.

Emotional and Physical State

Because there is usually some anxiety associated with tests, taking an exam may create physical and emotional tension. There are wide individual differences between people regarding how they experience this tension. Some common signs are muscular tension, especially in the stomach and neck, headaches, nausea, rapid heartbeat or breathing, heavy sweating, and general feelings of anxiety and tension. Please look over the Test Anxiety Checklist on page 13. Many of these items refer to the physical and emotional side of test anxiety (some relate more to the cognitive or "thinking" side, you will notice). Review these items and note especially the ones you marked "a fair amount," "much," or "very much."

Review

The chief difficulty with these physical and emotional reactions is that they tend to become habitual and even to increase and get out of control. If you get anxious on tests very often you probably have developed a habit or automatic response of anxiety and tension to tests. When a test is announced, when you think about a coming test, or when you sit down to take an exam--you automatically become tense and anxious. The reaction may only be moderate at first. But it may increase and grow difficult to control.

As mentioned earlier, many of the things we naturally do to try to combat rising tension only tend to increase it. For example, we make an effortful response that only increases tension rather than reducing it. We tensely try to "fight through" the tension and anxiety, trying hard to concentrate and function in spite of it. This may help momentarily, but then the next time the tension builds up, it is likely to be worse. By fighting the tension we add to the problem. Even if we try and relax when we become

aware of feeling tense, it is often too late to do much about it by just telling ourselves to relax. We did not really become aware of being tense until it was already too great to relax away easily.

So--the behavior route leading to test anxiety is characterized by increasing tension and by ineffective or actually detrimental attempts to reduce it. It is possible, however, to take steps that do reduce tension rather than increase it. It is possible to take steps that lead directly to the opposite of tension, namely physical and emotional relaxation. You cannot be both tense and relaxed at the same time. They are mutually incompatible states. If you can directly relax, tension and anxiety will diminish. Fortunately, despite the great variety of different ways people manifest anxiety, there are a few simple procedures for becoming relaxed that work for nearly everyone.

At this point we will describe one of these techniques for becoming relaxed. Just from this description, and a little imaginative practice on your own, you should be able to develop useful relaxation skills.

In most study and test situations when you notice yourself becoming tense or anxious, you can effectively relax (and diminish tension) by taking in a very deep breath, holding it for two or three seconds, and then very slowly letting it out. Usually it is best to repeat this deep breathing exercise one or two times. There is good evidence that slowing down your breathing like this and taking in a very deep breath and then slowly letting it out has the effect of directly slowing down your heart rate and reducing accompanying experiences of anxiety. On the following page this whole process is described in more detail. Please look this over very carefully.

Slow Deep Breathing

- 1) Take your attention completely away from the test or studying for 20 to 30 seconds. A few seconds won't cost you anything, and it may gain you much. It is important to momentarily "forget" or stop thinking about the test as much as possible.
- 2) Settle back or slump into a position in the chair that is as comfortable and relaxed as possible. Don't try to relax or do the slow deep breathing in anything but the most comfortable position you can quickly settle into. Close your eyes.
- 3) Relax all your muscles throughout your whole body. Don't do a halfway job, relax entirely and all over. Don't try to relax so much as just let go of all muscles and tension; let them go loose and heavy. Some people help this along by first tensing all their muscles in that comfortable sitting position, holding the tension for about five seconds (throughout the body) and then letting go and relaxing entirely all muscles.
- 4)* Having let go and relaxed, take in a very deep breath and hold it for a few seconds, then very slowly let it out. Repeat this once or twice, keeping your eyes closed.
- 5) You can deepen the relaxation and help relax away feelings of tension by thinking silently to yourself the words "calm" and "relax" as you slowly let out your breath. Think or picture these words to yourself as you slowly let out the breath. This is especially helpful during sessions when you practice relaxing and slow deep breathing, or during studying, or before a test begins. At these times (as opposed to during the test itself) you can take in and slowly let out five or ten deep breaths, saying to yourself "calm" and "relax" each time. This more intensive practice will help you to relax more quickly and reliably when you briefly do slow deep breathing during tests.

*Step (4), taking slow deep breaths, is the essence of the technique. The other points have to do with setting the stage and practice.

Put more briefly, the important steps are:

- 1) Take attention away from test
- 2) Get very comfortable
- 3) Relax all muscles
- 4) Slow deep breaths
- 5) Think "calm" and "relax"

The key to this procedure is to relax all over and take several slow deep breaths. If it helps you can adjust the rest of the procedure to your particular case, using what you discover with practice works for you. It is very important to practice relaxing and slow deep breathing in a chair. The direct result of practice is much increased ability to quickly and reliably get relaxed--physically and mentally--during tests.

Don't be fooled by the apparent simplicity of the technique. One of the real problems with tension is that you are often not aware you are tense until it may be too late to do anything about it. Practicing getting relaxed like this will make you "tuned in" to the states of tension and relaxation. It will greatly increase your awareness of what they are like and what it feels like when they come on. This will make it possible for you to relax much earlier in the process, either naturally or through this technique.

Practice is very important. It will help you a great deal to practice relaxing via slow deep breathing in the following way:

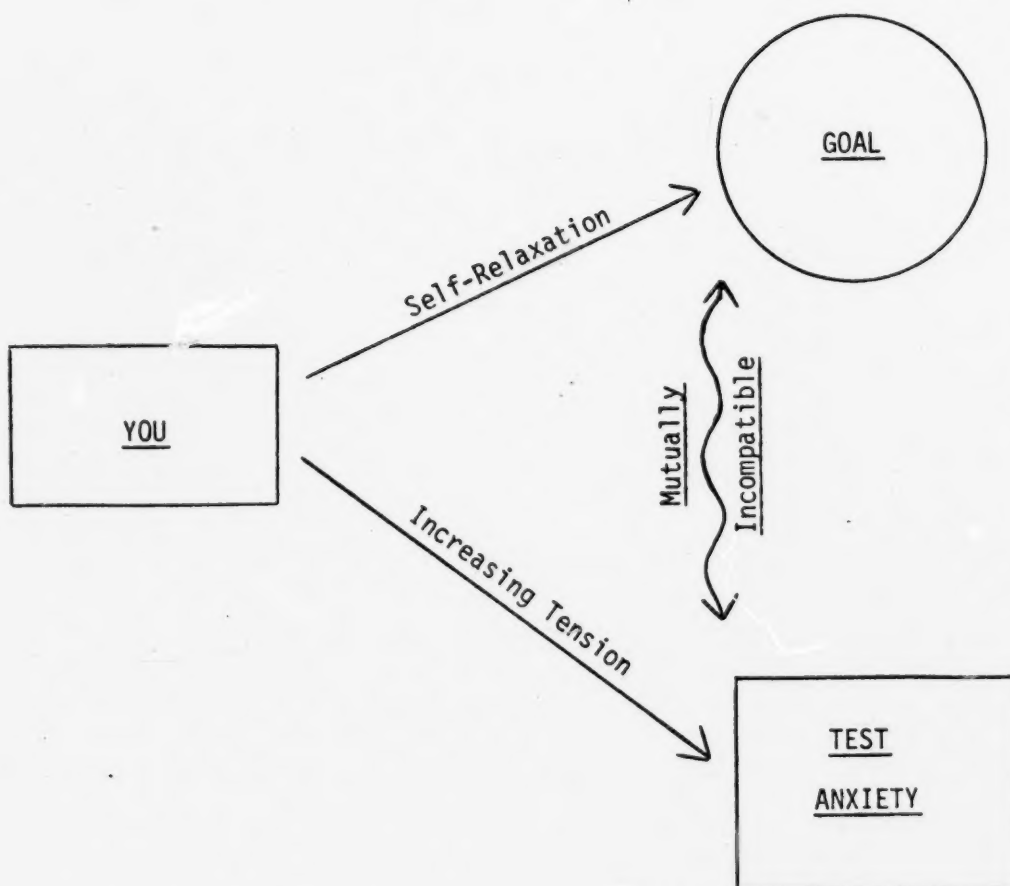
- 1) Set aside fifteen minutes a day for the next two weeks for relaxation practice.
- 2) Sit in a study or "work" chair (rather than comfortable arm chair) with a text book or study notes.
- 3) Read the book or review the notes for a minute or so, and then interrupt your reading for about 30 seconds to practice the slow deep breathing technique described

on page 41. Return to your reading for a minute, and then practice the relaxation technique again, repeating this procedure several more times.

- 4) Notice that with practice you can get very relaxed quickly. Adjust the technique in any way that makes it work better for you.

One of the advantages of a technique like this is that when you get tense you at least have something to do about it. Intentionally doing something different from continuing to tense up will tend to reduce the tension. If you are prone to test anxiety, you probably don't do anything at that point.

Perhaps the most important comment to be made about this relaxation process is that it is directly incompatible with increasing tension and anxiety. To the degree you can relax like this, anxiety and tension must go down. It is like coming to a fork in the road--you can go one way or the other, but not both. By developing the skill of relaxing through slow deep breaths you can choose the more desirable road (i.e., behavior route) and prevent traveling the other. Adding this point to the diagram we get:



Direction of Attention

A key factor in coping with anxiety in testing (and many other) situations is whether you direct your attention to yourself or to the test-taking task--in general terms, whether attention is directed to self or task.

People tend to respond in one of two different ways to a challenging, threatening, or anxiety-arousing situation. The first way attention is focused on self, leading to worry, anxiety, and ineffective dealing with the problem or task. The other way attention is focused on the task, leading to involvement in the task, little worry or fear, and as successful dealing with the problem or task as possible. In this section we will describe and illustrate these two different ways of directing one's attention and their consequences. It is very important as you read through this section to remember that the basic point is very simple: self-preoccupation leads to worry, fear and poor performance, while task-involvement leads to relative calm and reasonable success. Don't let the details, which hopefully you will find interesting and helpful, obscure this basic, simple principle.

Let us illustrate this basic point first in terms of a situation other than test-taking. Suppose you see a member of the opposite sex at a social gathering who strikes you as interesting or attractive, and you wish to strike up a conversation with them. (For convenience of description let's assume you are a male approaching a female, although it applies equally well the other way around.) You can carry through on your wish in a task-oriented manner, or lose your way in self-oriented thinking. For example, once it is clear that you want to approach this person (you are interested and have nothing else you have to do), then you may simply turn your attention and thinking to the first part of the task--to think of something appropriate to say in order to start a conversation. If you really focus on the relevant aspects of the situation and task, in just a few moments you can evaluate all

the different aspects of the situation and run through many possible "opening lines." If you do this, you are sure to find something adequate to say. Since something simple and direct is usually best, you might say to her, "Hello, my name is so-and-so. How are you enjoying the picnic?" She smiles, says something friendly, and the desired conversation begins. However, you may not be so task-oriented. At the point where it is clear that you want to approach her, you may hesitate. You may find yourself manufacturing doubts and uncertainties about whether you really want to speak to her, or whether it would really be appropriate to do so. Of course, you are avoiding taking the first step because you are anxious about looking silly or being rejected. If you don't give up completely you may start to actively worry about these concerns. You may start to wonder whether or not she will respond favorably to you, and start to imagine all the possible reasons why she might not like you. It is almost as if by digging up all possible reasons for rejection and thinking them over you hope to bolster your confidence or improve your chances. In fact, you cannot eliminate the risk of rejection. All this kind of self-oriented thinking does is destroy your confidence. Imagine how you feel after parading all your possible faults and flaws before your mind's eye! You may try to "think positive," but if you do this at any length you are probably trying to fight underlying doubts or negative thoughts that are very strong. An inner dialogue (worry) like this almost never leads anywhere. It is based on the assumption that it would really be "terrible" or "awful" if you were rejected. This is simply not true. If she does not respond positively, that's simply a disappointment--it does not have to be painful at all. And it is no reflection on you if that happens; it just didn't work out. All you can do is fairly quickly arrive at a reasonable course of action and act. Then one smile and pleasant word from the young woman will take care of all worries and doubts.

Worry or self-oriented thinking prevents the really important thing from happening--that is, you getting feedback as a result of action. It tends

to destroy confidence and whip up more and more panic until you cannot act. Task-oriented thinking, on the other hand, is aimed at devising the best course of action--neither more nor less than just that. Of course, you may get negative feedback or results. But your self-confidence need not depend upon what one particular person does on one occasion (any more than it should depend on your success with one test question, or one test). If you are thinking in a task-oriented manner, you can almost always learn from negative feedback, increasing the chances of success the next time. That is about all anyone can reasonably expect.

To press the illustration a little further, suppose that as your conversation with this young woman proceeds you say to her something like, "These picnic grounds look so different today. Just last week I was here for that tremendous rally for Senator Claghorn." Then, she suddenly frowns a little, looks at the ground, and doesn't say anything. Once again, you may get mired in self-oriented thinking. You may start thinking a lot of negative and fearful things like, "I wonder if I offended her, what should I do now?" or, "I really blew that one, foot in the mouth again, when will I ever learn to be more careful?" or, "What is she thinking, I can't tell what she's thinking, I don't know what to do?" The fact is that you cannot really know what is on her mind until you ask. Until you have that information, it does no good to worry. Task-oriented thinking would be limited to noticing that something made her uncomfortable and devising an appropriate, polite, but direct inquiry. You might say, "How do you feel about that election? I get the feeling you might not be too favorable to Claghorn." She might very well reply, "No, actually, I was feeling a little ashamed because I don't know as much about the Senate race as I should. I was thinking about supporting Smith, but I would be interested in knowing what you think about it." Even if she turns out to be an avid Smith supporter, the best course is to find out and take it from there, seeing what kind of exchange of ideas is possible.

Obviously, there are differences between this kind of social situation and test-taking. A major difference is that in the testing situation no other people are involved--you interact with an impersonal task. Also, you do not get the same kind of feedback as you interact with the situation on tests. You have to wait until later for outside confirmation of your choices or answers. Nevertheless, there are important similarities between these situations having to do with the different effects of directing your attention to self or task. Directing your attention to the test leads to task-oriented thinking, which leads to your best response and to whatever information you can obtain from calmly reasoning, remembering, and thinking over possibilities in connection with a test question. Directing your attention to yourself leads to a downward spiral of anxiety and self-doubt, and cuts off your own resources of memory and reasoning.

A good example of the difference between these two approaches has to do with memory, or trying to remember something in response to a test question. Nearly everyone feels like they remember very little when a test begins. At first glance there seem to be only a few facts or ideas "right there" in your mind or consciousness. What often happens is that when you come to a question to which you do not immediately know the answer, you feel like you "don't know" or "can't remember"--and then begin to get anxious or panicky. When you get anxious you focus your attention on yourself. You rivet your attention on the lack of information or ideas "right there" in your mind. You picture to yourself and think about the emptiness. Since that quickly comes to occupy most of your attention, of course nothing else comes. Then the downward spiral may start. You begin, naturally, to get even more anxious--time is passing and nothing comes. You may begin to worry about what will happen if you can't remember anything, and of course nothing is likely to come while you are doing that! You may picture yourself doing poorly on the test, feeling terrible afterwards, or other consequences of doing poorly. This, of course, takes your attention even further away from the task. You may begin to berate

and criticize yourself, thinking things like "I must be stupid," "I'll never get it," or "What can I do!? It's hopeless!" This also takes your attention from the task of remembering and becomes a self-fulfilling prophecy.

Directing your attention to the test or task, however, can have very different results. Remember, there is no reason why you cannot remember about as much as anyone else and perform up to your ability. When you first draw a blank, instead of focusing on the blank (yourself), you might start in anywhere focusing on or thinking about things relevant to the test question (the task). As soon as you start thinking about or saying to yourself things relevant to the test question that you do know, then more things will come. In fact, it is inevitable, you couldn't stop the process even if you wanted to. No one can remember very much immediately, but as they think about and get involved in the task, a great deal of information that has been stored away starts to come back. You say to yourself one thing you do know, and suddenly you are thinking or saying to yourself many other things you had momentarily forgotten.

An everyday example may help illustrate this point. You have probably often had the experience of thinking of something you wanted to ask a friend, and then not being able to remember what it was you wanted to say when you later run into him. At that point you may "try" to remember, but can't. Your mind is blank, you focus on that blank and try hard, but nothing comes. There is another way you might try. Instead of focusing on the blank, remember and picture to yourself the circumstances when you first thought of what you wanted to say to your friend. There is always some place to start, and then your associations or thinking might proceed something like, "Let's see, I was walking down the hall to the library...there were some posters about the art fair on the wall...I was thinking about going to the fair...I turned into the library and walked past the card...Oh...I remember...I wanted to ask if you picked up the football tickets like we said." Putting yourself

visually back in that situation and thinking about it is analogous to focusing on the task and engaging in task-relevant thinking. Try this out on yourself as an experiment. Most of the time it actually works.

In the test situation, then--relax and think about or picture to yourself any cues relevant to the question. Recall books, pages you have read, notes you have taken, similar ideas or principles you do remember, etc. Relax mentally so that many different associations will run through your mind. Don't become more anxious as you proceed. Be confident that the more task-oriented thinking you do, the more likely you are to come up with usable ideas or remembered facts. As you start in anywhere and get involved in the task, anxiety goes down. As ideas come and you have something to work with, you no longer have any reason to be anxious. You may be stumped by a particular question, but focusing on the task will work a satisfactory amount of the time.

The same principles apply when, rather than remembering, reasoning or thinking or "figuring out" is the key factor in responding to a test question. Often students begin to get anxious when they have difficulty picking the best answer on a multiple choice question. It is easy to get off the track by focusing on your uncertainty or what you don't know and then letting panicky thinking and self-criticism take your attention further away from the task. Focusing on the test question and engaging in task-oriented thinking in this situation is really a very simple, natural process. But for the purposes of understanding it better, it can be talked about as having three parts.

First of all, focusing on the task means paying attention to exactly what the question really says or asks. Quite apart from problems with anxiety, one of the most common mistakes on tests, is not to answer the question that was asked as a result of not paying close attention to what it says exactly. It helps to focus on the question and ask yourself, "What exactly does it say...it doesn't say this...or this...it just asks _____."

Secondly, focusing on the question means beginning to consider the alternatives in a fairly relaxed way. Task-relevant thinking here includes remembering (as described above), reasoning, adding up the plusses and minuses for different responses in your head, etc. It is usually clear whether the content of your thinking refers to ideas and cues relevant to the task and solving it, or to worries about yourself.

Finally, focusing on the task means stopping and making a response or answer at the appropriate point. There comes a point when you are not recalling any new information and seem to have done all the reasoning or considering of alternatives possible. Usually, at that point, one response or answer seems to "make sense." At the least, one answer seems relatively better than the others. It is very important that you learn to become aware of or tune into this point when your own thinking or judgment tells you that a response makes sense--either you remember the correct answer, or arrive at a conclusion, or perhaps have a strong feeling that one answer is right. At this point you are getting a kind of feedback or result from your own thinking processes. Usually this feedback or result is correct. Almost always it is your best bet. Test anxiety can interfere with this process in two ways. It may draw you to focus your attention on yourself, so that your thinking never gets to this point. Or it may generate worries and self-doubts--that you can't be certain, that there may be some hidden meaning, that you may have forgotten something--which tend to undo the result or conclusion you have come up with. Just as in the example of approaching someone socially given above, there comes a point when task-oriented thinking has done all it can, and it is time to act. If you act you will get feedback later of a more objective kind that you were right a reasonable percentage of the time. This will give you increasing confidence over time that your judgment is correct. Once something first makes sense, there is rarely any more you can do except act. Anything beyond that is usually fruitless worry that detracts from continuing attention to the test or task.

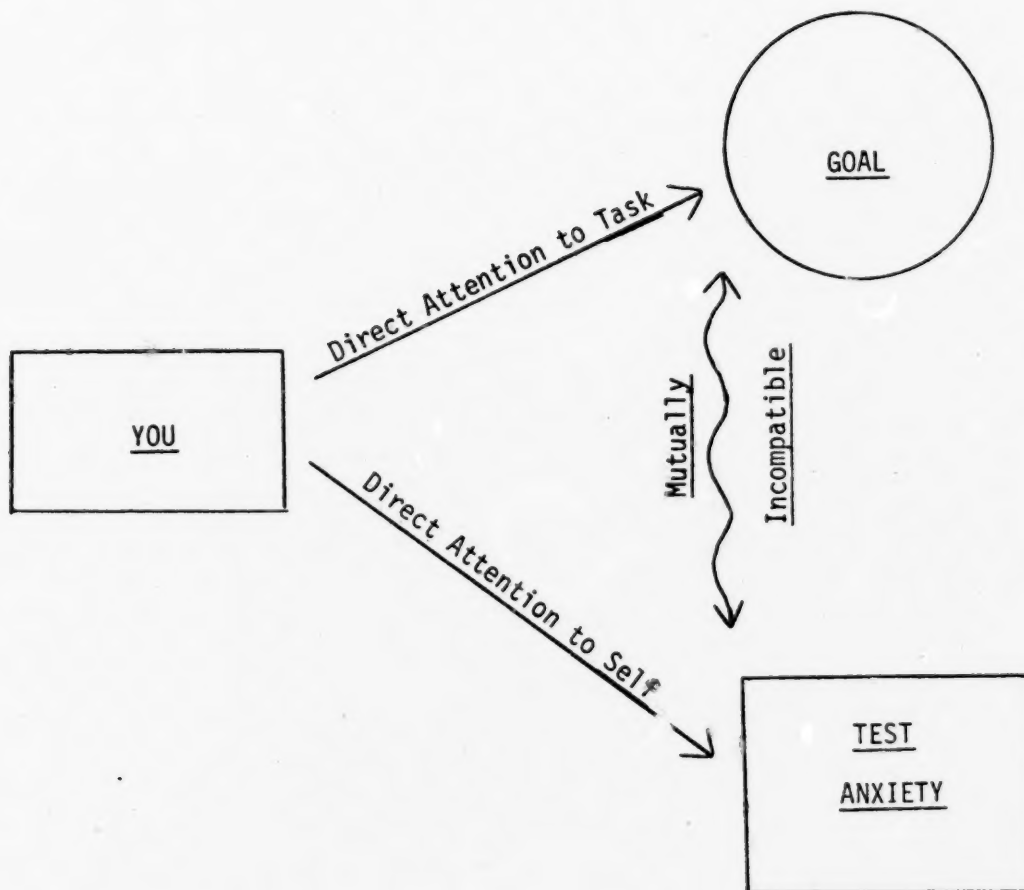
Of course, there are other kinds of tests and test questions. But there is always some way to get involved with the task and task-relevant thinking. On essay exams, when stuck, some students find it helpful to just start writing anything at all relevant to the question. Then one starts to think about the question in a relevant manner, and ideas come. A good way to study for many kinds of tests is to dialogue with a friend about the subject matter, perhaps developing answers to possible questions. In a sense, during the test itself, you can start a dialogue with yourself. Silently to yourself or on paper you can initiate and carry on the thinking process.

There are no one or two basic ways of shifting your attention from yourself to the test or task. Certainly the slow, deep breathing technique can be used to help interrupt self-oriented worry. Beyond that, one important thing is to be very clear about the distinction between paying attention to self or task and to be able to recognize the specific case or moment when you are drifting off into focusing on yourself instead of the test. The use of self-instructions and self-talk, as discussed in the next section, can help you keep focused on the test. As a result of continued experience and practice on tests you will develop greater skill at keeping your attention on the task.

Part three of the manual contains some brief exercises to assist you in discriminating behaviors of yours that reflect paying attention to the task from those that reflect self-oriented worry.

In many ways, the factor of ~~direction~~ of attention is the most important in understanding and dealing with test-anxiety. While high levels of tension interrupt performance for most people, some individuals can keep their attention focused on the test and perform well in spite of it. A few even find that high anxiety facilitates their performance. The key factor is attention to and involvement with the task, which brings results.

Illustrating the factor of direction of attention in terms of a diagram, we get:



Self-Instructions and Self-Talk

Everyone, in a very literal sense, "talks to themselves." What we do, and how well we do it, depends to a great extent upon what we say to ourselves.

This is most evident with children. You might patiently teach a child how to make something with blocks by saying to him several times, "Now you put the red block on top of the blue block, just like this, see?" If you should observe him later doing it by himself, you might well hear him say to himself out loud, "Now I put the red one on top of the blue one, see? Good boy." The words and praise you used with him he now uses to talk to himself. These words and instructions guide him and determine what he does to some extent. If you show him once how to do it, and then when he fails you say to him, "Oh, what the hell, you'll never get it," later you might observe him trying it once, failing, and then angrily pushing the blocks away saying, "I can't do it, see, I can't do it."

Adults also talk to themselves by means of words and pictures. They carry on a rich inner dialogue which determines much of what they do. It is usually silent and very rapid or abbreviated self-talk, but self-talk none the less.

This might be illustrated with an example having to do with anxiety, but not test anxiety. The following is a true account. A young man requested help from a counselor for a bad case of acrophobia or fear of heights. Whenever he stood on a high place, like an open balcony on a high building, or near the edge of a cliff, he would become frozen with fear. Upon closer analysis it turned out that what really seemed to cause the anxiety reaction was the way he talked to himself by means of words and images whenever he thought about or actually confronted a high place. When he stood near a

balcony railing, for example, he would say things to himself like, "My God, what if I fell off, what if the railing broke," or "What would it be like to fall over, terribly frightening, it would seem so long, terrified the whole way," or "I can just imagine myself all bloody and broken down there, how awful." Also, he became aware, he would picture to himself over and over an image of himself jumping or flying over the edge of the balcony. This man's phobia was not a reflection of any other problems or concerns. He knew that the balcony was safe, that there was almost no danger, and that he would never lean on the railing in a dangerous manner anyway. And he had never had any frightening experiences with high places before in his life. He thought he might have read once about a gruesome fall from a mountain climbing accident and thought a lot about it. In any case, it became clear to him that he was causing or generating his fear of heights by thinking and picturing these kinds of frightening things over and over again until he had whipped up a high level of anxiety. Anyone who went through that train of thought or images, he realized, would end up frightened. Having become aware for the first time of what he was saying and thinking to himself, it was possible to do something different. He consciously devised some alternative things he could say to himself, self-talk and self-instructions that were incompatible with increasing anxiety. For example, "Since there's no realistic problem here let me just get involved in other things...I'll enjoy the view and think about it...or talk to someone...there are a lot of pleasant things to do here." Since he had built up a very strong habit of responding to heights with fearful self-talk and high anxiety, some brief "desensitization" therapy was used. He would get very relaxed in a comfortable chair and then visualize himself in situations involving heights in which he used appropriate self-talk and picture himself calm and relaxed in those situations. After several hours of this kind of "mental practice" of non-anxious responding and self-talk, his phobia largely disappeared.

The main point is that it is not so much the situations and their pressures that cause fear, but the things we say to ourselves when confronted

with those situations. In recent years psychologists have discovered some ways, like the desensitization procedure mentioned just above, for eliminating irrational and excessive fear responses to specific situations. One of the most successful techniques for dealing with test anxiety has turned out to be: (1) Identify the kind of fear-generating self-talk you engage in during tests, and (2) Develop and substitute alternative, incompatible self-statements that calm you down and focus your attention on the task at hand instead of on worries about yourself. Part of this program is aimed at helping you do this for yourself.

First we will mention several general categories of fear-producing self-talk. Then we will give some examples taken from the report of students who have participated in programs like this in the past or have volunteered to describe their thoughts and images during a test. Finally, in this section we will give some examples and guidelines concerning the development of alternative self-statements that are incompatible with rising anxiety and help to eliminate it.

Anxious self-talk during studying or tests tends to fall into the following categories. Look these over before reading the examples that follow.

- a) Worrying about your performance, including how well others are doing as compared with you.
- b) Ruminating too long and fruitlessly over alternative answers or responses.
- c) Being preoccupied with bodily reactions associated with anxiety.
- d) Ruminating about possible consequences of doing poorly on the test--disapproval, punishment, loss of status or esteem, damage to academic record or job chances, etc.
- e) Thoughts or feelings of inadequacy--this may include active self-criticism or self-condemnation, calling yourself "stupid," etc.

You will want to refer back to this list later. It can serve as a handy list of criteria for deciding whether or not a particular behavior, thought, or way of approaching tests is helpful--that is, whether it is associated with worry and directing attention to self or attention and involvement with the test itself.

Read carefully the following verbatim reports of anxious self-talk by other students. As an exercise, on the line to the left of five of the examples, put the letter (a through e) of the category of anxious self-talk from the list on page 56 to which that example belongs.

"I've just got to make a B on this exam so I can make a B in the course...because I have to get a B in my major and minor to get the job I want."

"(as test begins) What in the world will he ask? I've never taken a course like this before. Some parts of the book were very confusing and I don't know if I got them right. I studied for a general understanding of the stuff, but what if he hits us with a bunch of specifics...look at those multiple choice questions--specifics all over the place--I'll probably flunk!"

"I'm on a scholarship that takes a 3.0 to keep it. I hope I studied well enough not to mess that up. Oh, God, if anything happened to that, then what would I do. I'd have to pay out of state tuition...I can't afford that...then what, then what?"

_____ "Now calm down and stop that shaking...crazy shaking, stop it! What's happening to me, it won't stop, what's happening to me?!"

_____ "I hate this class! Why do we have to have tests? Oh, my God, I don't know any of this and I studied for so long. I must be so stupid. I'm going to blow my whole grade on this one test! I want to drop this course. What am I going to do...what am I going to do? I am really scared."

"I wonder if I think the way the prof does? What will he ask? Will he be picky? Oh...what if we don't consider the same things important."

"Wow, this really looks hard! I studied that...why can't I remember it? I should have studied harder. How can I get that, it looks too hard! Now what? I should have studied harder!"

"Oh, no, multiple choice. Every time I have trouble with multiple choice tests I get sick. The last time it ruined the whole day. I'll be just sick if I have to go through that again! Why couldn't it have been some different kind of test?"

"I know the general idea but I'm afraid I can't get it down in concise words...I wonder what he wants...I don't know exactly what he wants. How would he grade that, there's no way to tell. Should I add something? Who knows? I wish it had been multiple choice...I feel hopeless."

"(looking over whole test) I don't think I can answer page one. I think I'll throw up! Page two looks a little better. My God, I'm never going to get through. I can't think. I have to write faster, faster somehow. I wish the noise would stop...listen to that damn noise. I can't remember. I'm not going to finish."

"Jesus, that's two in a row I didn't know. I feel so tight. What if I can't get the next one! Then what!"

"I really studied for an objective test, not short answer--that really throws me off. Man, this is just like beginning psychology, and I had trouble there. I want to do well, but probably won't, even though I studied and do care about learning it. So much for sincerity...it's a crime you have to study for letter grades instead of the pleasure of learning it...but you better believe that's it if you want to go to grad school. I can just see myself now, man--working in a coffee shop instead of teaching! I hope nobody gets them all right and screws up the curve!"

"There probably won't be enough time, there never is, damn it. My hands are so sweaty I can't hold this pen. Rush, I've got to rush...I just hope somebody up there's with me."

"Oh, I wish I were through. I can't wait to get through. My God, what a long test. When will it ever end--so many questions."

"If I miss two more I know I can't make an A, let me look again...I just have to know the rest of the answers. Oh--where did he dig that question up. Why is this taking me so long, others are leaving. Why aren't I sure of that answer--I studied so hard, so hard!"

"Why'd I get drunk last night? I feel dizzy. He's not through yet, oh good! He's not. She's through 20 minutes early...Damn! I hope I'm not the last one to finish. God, that question makes no sense...Oh well, maybe he'll give me a few points...most everyone is still here."

When people first put their self-talk down on paper or say it out loud, they are usually struck by the vivid and dramatic character of the things they say to themselves. One student commented, "I really talk to myself like that, all the time, really beat on myself with that stuff. No wonder I get upset!" Notice how this kind of self-talk, and sometimes quite direct self-instruction ("Rush," "Look around the room and see how others are doing"), takes one's attention away from dealing steadily with the task, and whips up panic. In the last part of the manual, you will get a chance to articulate some of your own self-talk during tests and see what it looks like.

Anxious self-talk is much more vivid, varied, and interesting than task-oriented self-talk. Nevertheless, included below are some of the self-statements people have worked out for themselves to combat test anxiety. Inevitably these will sound a little artificial. But don't lose sight of the fact that some kind of task-relevant self-talk is always going on. It may not be as lengthy as the examples below. Often it is just a quick thought, not a drawn out sentence. Also, a lot of such self-talk is simply internal thinking about and considering the subject matter of the test itself--so there are not the long monologues found above. But there are always key points when it is possible to become distracted or tense, and this kind of self-talk helps you get back on the track.

"Now let's see, what does it say exactly...don't interpret or add anything--just exactly what does it say?"

"O.K., now, it's a little puzzling, but what is my basic feeling about it, really--usually I can trust that."

"Now, don't look for tricks, just what does it say. What's the basic question, what's the main point?"

"O.K., which one is the most true, as best I can tell?"

"Let's see, I made some notes on that...had something to do with the...toward the end of those notes on yellow paper, I think..."

"I don't want to get lost in detail, here, let me kinda step back and look at the big picture..."

"Don't get anxious...just take off a moment and take a couple of slow, deep breaths...calm...and relax...good."

"How can I make this complete...I've covered most things, but is there anything I could add to dress it up here?"

"Umm, lots more to go to the finish...don't worry about that, just take them one at a time, it'll feel good when it's over."

"Damn, I should know that...O.K., just let it go now, no need to fuss. I'll come back later on for a fresh look at it--that often works."

"I can't get the feel of how to say this...well, let me just start writing about that, that's part of it anyway, and maybe that'll get me into it."

"That's a stupid question! O.K., it's stupid, or I don't get the point. Let me just do a quick job on it and invest my energy where it will pay off more."

"Slow down a little, don't rush and get all in a panic...there's time for most of it."

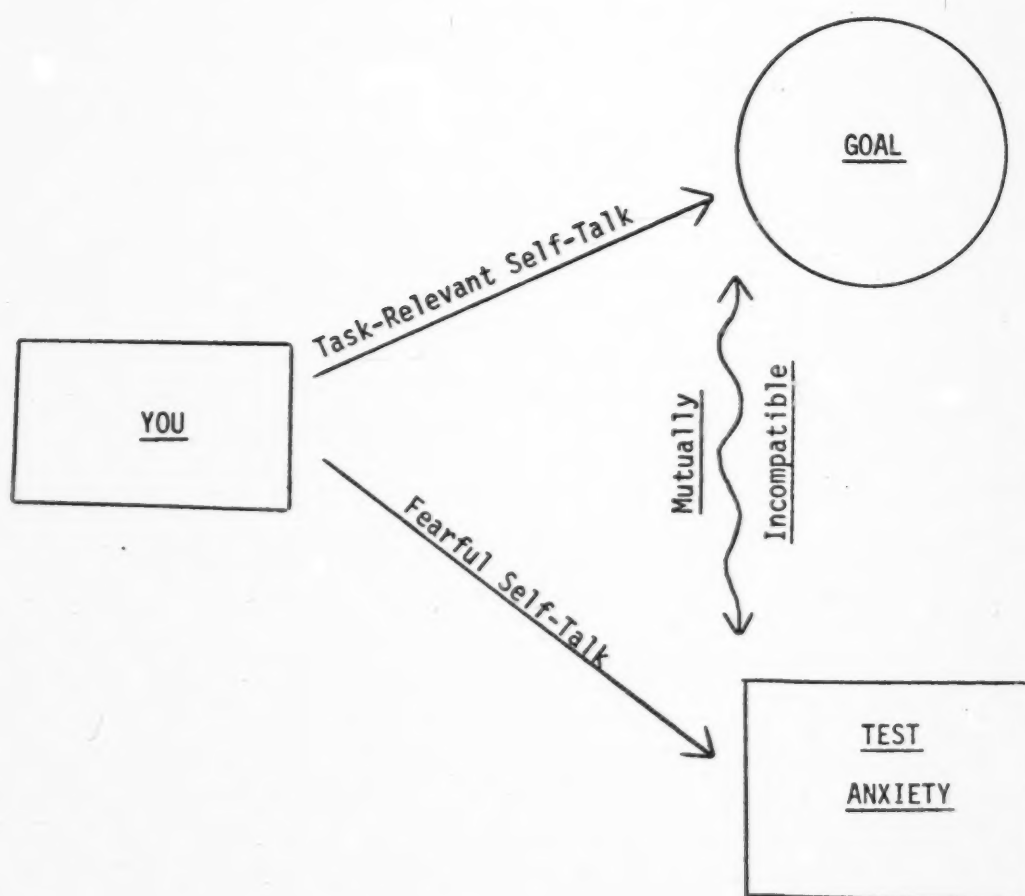
"Wonder how many I can miss for a B...well, I'll figure that up later, just pay attention and finish this up."

"They finished early, I wonder...hell, there's no way I can know what's going on, forget them."

"My hands are sweating, damn...O.K., must be tense, just settle back and relax for a moment...it won't kill me anyway."

With practice, you can get to the point where the entire test-taking time is filled up with self-talk like this, and other thoughts relating to the content of the questions. When this happens, you will have little trouble with test anxiety.

Anxiety-generating self-talk and task-relevant self-talk and instructions are mutually incompatible. Insofar as you engage in the one, you prevent the other from occurring. In diagram form, once again, this becomes:



Preparation Management

How you handle the whole business of anticipating and preparing for a test can influence how anxious you feel on the test--it can help or hurt you as far as preventing test anxiety is concerned.

It is practically impossible to state any generally applicable advice about preparation for tests so far as managing anxiety is concerned. Much depends on the individual. One man's meat is another man's poison is the only general rule. And yet, it can make a difference for you how you handle some of the specifics of preparation for tests.

For example, some people are very well advised to finish studying at night for a test the next day, and not open a book the morning or day of the test. For them, to study up to the last minute feels like a desperate, panicky activity and really sets them up for test anxiety. On the other hand, some people can calmly review notes and outlines up to the last minute with no problem at all. It increases their confidence, they feel they stamp in the basics in a helpful way, and it gives them something constructive to do instead of worry.

The same goes for cramming. Almost anyone will profit from setting out some kind of schedule of preparation for a test on paper even if often you can't follow it exactly. It organizes your thinking and gives you a feeling of things being under control. Some people need to prepare gradually, step by step, over a period of several weeks in order to feel that they are in charge of the situation. For them, to cram during the last few days or the night before engenders great panic. Others, on the other hand, can stay up all night before a test, if they have to, and prepare systematically and efficiently for the test. If you tend to have difficulty with test anxiety, to be sure, it is usually best to approach the test in a steady, systematic manner over several days or weeks.

It all depends on what works, or doesn't work, for you. There is one general principle that can be stated. It can be useful to you when you apply it to specific behaviors and aspects of your situation.

The principle is: In connection with preparing for tests, make your plans and act in such a way that it gives you the feeling that you are in control of the situation and handling it smoothly, rather than that the situation (test) is controlling and getting the best of you. Do whatever gives you a feeling of confidence, being in control, or being in charge of the situation.

Some behaviors that usually fail to pass this test are: missing meals and sleeping irregularly before exams; staying up late the night before; getting to class early and listening to all the nervous chatter before the test begins; waiting to study until the last minute; and trying to review everything at the last minute instead of concentrating on fundamentals and basic notes or outlines.

If you give it careful thought, you can usually identify some particular behaviors of yours that reflect panic instead of calm control. That is really the basic question: Does this behavior seem typical of someone who is panicky, tense, and feeling out of control of the situation? Or does it reflect the approach of someone who is reasonably confident and feeling he is in charge of the situation? You will have the chance to apply this criterion to some of your preparation habits in the last part of the manual.

One of the main reasons for identifying behaviors that reflect calm control and trying to carry them out is that when you do these things, your feelings often follow your behavior. When you behave as if you were in control, you find you feel that way.

PART THREE

DEVELOPING YOUR OWN APPROACH

In this part of the manual you will have the chance to individualize and apply some of the information conveyed above. The following exercises deal with the four main factors in coping with test anxiety discussed above. It takes only a little time, really, to make a complete, written response on these exercises. Please work them through carefully--much of the effectiveness of the manual depends on this activity.

At this time it would be helpful if you would review the material you generated earlier in the guide. You may also want to refer to this material again, but for now please look over pages 12-15, 25, 26, and 27-29.

Review

First of all, concerning emotional and physical relaxation, please consider the following question. Besides applying the relaxation technique of slow, deep breathing described previously, can you think of any other ways you could help yourself relax physically in the testing situation? (Don't deal now with the factors of direction of attention and self-talk, we will turn to them next.) Before you respond, take a few moments to recall previous testing situations. You may find it helpful to close your eyes and visualize a few of these situations. After doing this, make yourself some brief notes concerning any additional ways you might make the testing situation as comfortable and "untense" as possible for you.

Next, consider the factor of self-instructions and self-talk. In this exercise you will have the chance to generate your own kind of helpful and unhelpful self-talk. Before proceeding, please review the categories of helpful and unhelpful self-talk on page 56 and the examples of both on the immediately following pages.

Review

In the space provided below, using only the space to the left of the line, please try to record as many examples as you can remember of panicky self-talk from previous testing experiences. (Just ignore the space to the right--you will be using that later.) Try to write these down in as realistic sounding a way as possible, allowing, of course, for the fact that written-out self-statements never can sound exactly like inner speech--nevertheless, make them as authentic as possible. Before you begin, and several additional times as you proceed, pause for a moment and visualize yourself in testing situations. "Listen" to your self-talk as you do so. Try to generate as many examples of anxiety-producing self-talk as you can from your own experience. Don't exaggerate, but tell it like it is, as many as you can.

Now, using the space to the right of the line on the last few pages, generate a number of examples of helpful, appropriate self-instructions and self-talk. These may be ones you have found useful or have used automatically in the past, or new ones you devise right now. Generate as many as you can. Try to make them realistic or believable, as if you were writing a script of what actually might take place when you cope successfully with test anxiety.

You will be writing these down opposite to the examples of panicky self-talk you have already recorded. Look over the anxious self-statements and try, for as many of them as you can, to devise an opposite and incompatible instance of self-talk or self-instruction. Write this down immediately to the right of its anxious opposite number. Don't limit yourself to devising direct opposites, but put down as many instances of helpful self-talk as you can in the columns on the right.

Concerning the factor of direction of attention to self or task: first of all, make some notes below indicating the three or four main ways in which you typically let your attention become directed to yourself and worries not related to the test or task itself. Describe the process, which may include worried self-talk of some kind, noticing and worrying about how others are doing, expressions of anger or helplessness to yourself, and others. These are often quite unique to the individual--describe how it typically goes for you.

In this important exercise, describe concisely several ways you think, at this point, you might successfully direct your attention away from self and back to the test. (This may overlap with what you have developed in the exercises dealing with relaxation and self-talk.) Describe what you might do/in a realistic, believable way. Make it a brief, believable description of what might really happen the next time you successfully cope with test anxiety by directing your attention to the task. You might sketch an alternative to some or all of the ways you described above that your attention often gets deflected from the test. Be sure to role play these coping attempts in your imagination, to try them out and add to them. Even if brief, these should read to you like a script or scenario of how you would like to be. Making these responses realistic means keeping in mind that some anxiety is always present and has to be coped with on tests, occasionally strong anxiety in response to some difficulty or obstacle.

Finally, consider briefly the factor of managing your time and preparation for the test. In the space below write down any aspects of your typical procedure in preparing for tests that may contribute to heightened anxiety on tests. You may write something like, "only sleeping 3 or 4 hours before a big exam," for example. Then under this item make some notes to yourself along the lines of this question: Does this behavior contribute to a sense of being in control or in charge of the situation, or does it reflect anxiety and a feeling of not being in control? If your notes indicate that the behavior contributes to anxiety on tests, then add a note to indicate how it might best be changed. For example, in this case you might write, "get at least 7 hours sleep and have a pleasant, leisurely breakfast the morning of the test."

A Final Word

Hopefully you have gained some new information about test anxiety and begun to lay effective plans for coping with it successfully in the future.

You will discover that with continued practice and experience with tests, these skills of using appropriate self-talk, directing your attention to the test, and relaxing during tests will become quite natural and taken for granted. You will discover additional approaches and techniques that work for you, as you proceed--the information and exercises here are a beginning.

Should you find that you do not make smooth progress towards the goal of reasonably good performance on tests with a minimum of anxiety, you may need to take some additional steps. Do not ignore or suppress any difficulty you may be having. And, above all, do not regard it as a sign of failure or a problem that cannot be solved. If you have continued difficulty or do not experience steady progress, then you should consult a professional counselor. It may very well be that a few adjustments in your approach, dealing with some overlooked factor, will take care of the problem.